

24 OCT 2006

Mr. James Kalina
John Deere Waterloo Works
400 Westfield Avenue
Waterloo, IA 50704

Dear Mr. Kalina:

RE: Final RCRA Hazardous Waste Management Permit and Response to Comments
Final Remedy Decision for SWMU 19A and Southeast AOC 1 and Response to
Comments for John Deere Waterloo Works Facility
400 Westfield Avenue, Waterloo, Iowa
EPA RCRA ID No. IAD005289806

The U. S. Environmental Protection Agency (EPA) Region 7 office has made the final decision to reissue a Hazardous Waste Management Permit and to issue a Final Remedy Decision for Solid Waste Management Unit (SWMU) 19A and Southeast Area of Concern (AOC) 1 at the John Deere Waterloo Works facility in Waterloo, Iowa. Enclosed you will find the updated Administrative Record index, final RCRA Hazardous Waste Management Permit and Response to Comments, Final Remedy Decision for SWMU 19A and Southeast AOC 1 and Response to Comments, and a copy of the Declaration of Environmental Covenants. The original Declaration of Environmental Covenants has been mailed to Mr. Ted Olt, who is the attorney representing John Deere.

Comments were received on the draft permit and Statement of Basis for SWMU 19A and Southeast AOC 1 during the public comment period, which began on July 21, 2006 and ended on September 5, 2006. The final permit is changed from the draft permit based on several comments received. These minor changes are discussed in the enclosed October 2006 Response to Comments. Since comments were filed, the permit will not become effective until 33 days from the date of this letter in accordance with Title 40 Code of Federal Regulations (CFR) 124.15(b).

The comments received on the Statement of Basis have been included and responded to in the enclosed Final Remedy Decision and Response to Comments. The Final Remedy Decision for SWMU 19A and AOC 1 is the same as the one proposed in the Statement of Basis, which was public noticed.

Since comments were filed on the draft permit, any commenter may petition the Environmental Appeals Board (EAB), pursuant to 40 CFR 124.19(a), to review any condition of the permit decision to the extent of their comments made during the comment period. Any person who failed to file comments may petition for administrative review only to the extent of the changes from the draft to the final permit. All petitions for review must be received by the EAB no later than 33 days from the date of this notice.

RCAP *DM*
MURROW
10/ *24* /06

RCAP
ROHRMAN
10/ *24* /06
WAR

RCAP
SLUGANTZ
10/ *24* /06
L. Slugantz

464796



RCRA RECORDS

Any petition for review shall include a statement of the reasons supporting the review, including a demonstration that any issues being raised during the public comment period were raised to the extent required by 40 CFR 124.19 and when appropriate, a showing that the condition in question is based on: (1) a finding of fact or conclusion of law which is clearly erroneous, or (2) an exercise of discretion or an important policy consideration which the EAB should, in its discretion, review. Please see the web site at <http://www.epa.gov/eab> for Frequently Asked Questions (FAQ) and additional information regarding the EAB.

Submission made by mail to the EAB must be sent to the following address with sufficient time allowed for delivery so that it is received by the EAB no later than 33 days from the date of this notice:

U.S. Environmental Protection Agency
Clerk of the Board, Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460-0001

Submissions made by hand-delivery including couriers and delivery services must be made at the following address:

Colorado Building
1341 G Street, NW
Suite 600
Washington, DC 20005

The Administrative Record, which contains all the information considered by EPA in making its decisions regarding the issuance of the permit and final remedy, has been updated with additional documents, including the final permit and the October 2006 Response to Comments and the Final Remedy Decision for SWMU 19A and AOC 1 and Response to Comments. The Administrative Record will continue to be available for review by the public at the following locations:

Waterloo Public Library, 415 Commercial Street, Waterloo, Iowa 50701

Iowa Department of Natural Resources Des Moines Office, Wallace Building, 502 E., 9th Street, Des Moines, Iowa 50319

Iowa Department of Natural Resources, Field Office #1, West Main Street, Suite 4, Manchester, Iowa 52057

EPA Region 7 Records Center, 901 N. 5th Street, Kansas City, KS 66101

Please note, EPA is providing the people identified on the October 2006 RCRA Permit Mailing list a copy of this letter to serve as notice of EPA's final permit and remedy decisions. Included with their letter is a copy of the October 2006 Response to Comments and a copy of the Final Remedy Decision for SWMU 19A and AOC 1 and Response to Comments.

Thank you for your cooperation in this matter. For questions pertaining to the Final Remedy Decision for SWMU 19A and AOC 1, you may call Mr. Wray Rohrman at (913) 551-7543. For questions pertaining to the Final RCRA Hazardous Waste Management Permit, you may call Ms. Patricia Murrow at (913) 551-7627.

Sincerely,

Lynn Slugantz, Branch Chief
RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division

Enclosures

cc: Cal Lundberg
IDNR (w/o encl)
T. F. Olt III, Esq.
Lane & Waterman LLP (w/encl)
October 2006 RCRA Permit Mailing List (w/encl)
bcc: Gary Witkovski, EPA, Des Moines Field Office (w/o encl)
Bob Richards, CNSL (w/o encl)

ARTD/RCAP:cas:h:/PMURROW/JOHNDEEREPERMITFINALREMEDYRESPONSETO
COMMENTSTRANSMITTALLETTER.DOC.102306



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII

901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

24 OCT 2006

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John Deere Waterloo Works
400 Westfield Avenue
Waterloo, IA 50704

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Sincerely,


Lynn Slugantz, Branch Chief
RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division

Enclosures

cc: Cal Lundberg
IDNR (w/o encl)
T. F. Olt III, Esq.
Lane & Waterman LLP (w/encl)
October 2006 RCRA Permit Mailing List (w/encl)

FedEx
Tracking
Number

8576 4048 4520

MUR23

Form
ID No.

0215

Sender's Copy

1 From *Please print and press hard.*Date 10/24/06Sender's FedEx
Account Number

1423-6567-7

Sender's
Name Pat MurrowPhone (913) 551-7211Company US EPAAddress 901 N 5TH ST

Dept./Floor/Suite/Room

City KANSAS CITYState KS ZIP 66101-2907**2 Your Internal Billing Reference**

First 24 characters will appear on invoice.

OPTIONAL

3 ToRecipient's
Name James KalinaPhone (319) 292-4479Company John Deere Waterloo WorksRecipient's
Address 400 Westfield Ave.

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City WaterlooState IA ZIP 50704

0336471868

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4a Express Package Service

Packages up to 150 lbs.

☒ **FedEx Priority Overnight**Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx Standard Overnight**Next business afternoon.*
Saturday Delivery NOT available.☐ **FedEx First Overnight**Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.☐ **FedEx 2Day**Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
FedEx Envelope rate not available. Minimum charge: One-pound rate.☐ **FedEx Express Saver**Third business day.*
Saturday Delivery NOT available.

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

☐ **FedEx 1Day Freight***Next business day.** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx 2Day Freight**Second business day.** Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx 3Day Freight**Third business day.**
Saturday Delivery NOT available.

** To most locations.

* Call for Confirmation:

5 Packaging☐ **FedEx
Envelope***☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☒ **FedEx
Box**☐ **FedEx
Tube**☐ **Other**

* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ **SATURDAY Delivery****NOT Available for**
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.☐ **HOLD Weekday**
at FedEx Location**NOT Available for**
FedEx First Overnight.☐ **HOLD Saturday**
at FedEx Location**Available ONLY for**
FedEx Priority Overnight and
FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☐ **No**☐ **Yes**As per attached
Shipper's Declaration.☐ **Yes**Shipper's Declaration
not required.☐ **Dry Ice**

Dry Ice, 3, UN 1845 _____ x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ **Cargo Aircraft Only****7 Payment Bill to:**

Enter FedEx Acct. No. or Credit Card No. below.

☒ **Sender**
Acct. No. in Section
1 will be billed.☐ **Recipient**☐ **Third Party**☐ **Credit Card**☐ **Cash/Check**FedEx Acct. No.
Credit Card No.Exp.
Date

Total Packages

Total Weight

Total Declared Value*

\$.00

*Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

FedEx Use Only

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.☐ **No Signature**Recipient's signature may be left
without obtaining a
signature for delivery.☐ **Direct Signature**Anyone at recipient's
address may sign for
delivery. *Fee applies.*☐ **Indirect Signature**If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. *Fee applies.*

519

FedEx
Tracking
Number

8576 4048 4510

MUR23

Form
ID No.

0215

Sender's Copy

1 From Please print and press hard.Date 10/24/06 Sender's FedEx
Account Number

1423-6567-7

Sender's
Name Pat MurrowPhone (913) 551-7211Company US EPAAddress 901 N 5TH ST

Dept./Floor/Suite/Room

City KANSAS CITYState KSZIP 66101-2907**2 Your Internal Billing Reference**

First 24 characters will appear on invoice.

OPTIONAL

3 ToRecipient's
Name T. F. Olt + III, Esq.Phone (563) 324-3246Company Lane & WatermanRecipient's
Address 220 North Main St. Suite 600

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City DavenportState IA ZIP 52801

0336471868

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Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service☒ FedEx Priority OvernightNext business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ FedEx Standard OvernightNext business afternoon.*
Saturday Delivery NOT available.

Packages up to 150 lbs.

☐ FedEx First OvernightEarliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.☐ FedEx 2DaySecond business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ FedEx Express SaverThird business day.*
Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service☐ FedEx 1Day Freight*Next business day.** Friday
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Packages over 150 lbs.

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Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging☐ FedEx
Envelope*☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☒ FedEx
Box☐ FedEx
Tube☐ Other

* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ SATURDAY Delivery

NOT Available for

FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.☐ HOLD Weekday

at FedEx Location

NOT Available for
FedEx First Overnight.☐ HOLD Saturday

at FedEx Location

Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No☐ YesAs per attached
Shipper's Declaration.☐ YesShipper's Declaration
not required.☐ Dry Ice

Dry ice, 9, UN 1845 x kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender
Acct. No. in Section
1 will be billed.☐ Recipient☐ Third Party☐ Credit Card☐ Cash/CheckFedEx Acct. No.
Credit Card No.Exp.
Date

Total Packages

Total Weight

Total Declared Value*

\$.00

1 Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

FedEx Use Only

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.☐ No Signature Required
Packages will be left
without obtaining a
signature for delivery.☐ Direct Signature
Anyone at recipient's
address may sign for
delivery. *Fee applies.*☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. *Fee applies.*

519

Track Shipments
Detailed Results Quick Help

Tracking number 857640484520 **Delivered to** Guard/Security Station
Signed for by H.CARD **Service type** Priority Box
Ship date Oct 24, 2006 **Weight** 3.0 lbs.
Delivery date Oct 25, 2006 8:49 AM
Status Delivered

Date/Time	Activity	Location	Details
Oct 25, 2006	8:49 AM	Delivered	
	8:29 AM	On FedEx vehicle for delivery	WATERLOO, IA
	8:07 AM	At local FedEx facility	WATERLOO, IA
	4:53 AM	At dest sort facility	CEDAR RAPIDS, IA
	5:15 AM	Departed FedEx location	INDIANAPOLIS, IN
Oct 24, 2006	12:55 AM	Arrived at FedEx location	INDIANAPOLIS, IN
	6:25 PM	Left origin	LENEXA, KS
	6:00 PM	Picked up	LENEXA, KS

Signature proof

E-mail results

Track more shipments

Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address

Language

Exception
updatesDelivery
updates

<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format: ☒ HTML ☐ Text ☐ Wireless

Add personal message:

Not available for Wireless or
non-English characters.☐ By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Submit

Track Shipments
Detailed Results Quick Help

Tracking number	857640484510	Delivered to	Receptionist/Front Desk
Signed for by	L.HANSTROM	Service type	Priority Box
Ship date	Oct 24, 2006	Weight	3.0 lbs.
Delivery date	Oct 25, 2006 9:35 AM		
Status	Delivered		

Date/Time	Activity	Location	Details
Oct 25, 2006	9:35 AM	Delivered	
	8:11 AM	On FedEx vehicle for delivery	MOLINE, IL
	7:56 AM	At local FedEx facility	MOLINE, IL
	4:53 AM	At dest sort facility	CEDAR RAPIDS, IA
	5:15 AM	Departed FedEx location	INDIANAPOLIS, IN
	12:55 AM	Arrived at FedEx location	INDIANAPOLIS, IN
Oct 24, 2006	6:25 PM	Left origin	LENEXA, KS
	6:00 PM	Picked up	LENEXA, KS

Signature proof

E-mail results

Track more shipments

Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address

Language

Exception
updatesDelivery
updates

English

English

English

English

Select format: ☒ HTML ☐ Text ☐ Wireless

Add personal message:

Not available for Wireless or
non-English characters.☐ By selecting this check box and the Submit button, I agree to these Terms and
Conditions

Submit

October 2006

U. S. Environmental Protection Agency Region 7
Response to Comment on the Draft Hazardous Waste Management Permit for
John Deere Waterloo Works Westfield Avenue facility
400 Westfield Avenue, Waterloo, Iowa
EPA RCRA ID Number IAD005289806

The U. S. Environmental Protection Agency (EPA) has decided to issue a final Hazardous Waste Management Permit to John Deere Waterloo Works West field Avenue facility, which is located at 400 Westfield Avenue in Waterloo, Iowa. The EPA has made changes to the final Hazardous Waste Management Permit based on a comments received on the draft permit. The EPA does not consider these changes to be a major modification and therefore is not providing a second public notice or comment period.

Public participation activities associated with the draft and final permits have been conducted in accordance with 40 Code of Federal Regulations (CFR) Part 124. EPA provided a draft permit for public comment from July 21, 2006 to September 5, 2006. A public notice was issued in the Waterloo Cedar Falls Courier newspaper announcing the availability of the draft permit and the start of a 45 day public comment period. The Administrative Record for EPA's draft permit was available throughout the comment period at the Waterloo Public Library in Waterloo, the Iowa Department of Natural Resources in Des Moines, the Iowa Department of Natural Resources Field Office #1 in Manchester, Iowa, and at the EPA Region 7 Records Center, Kansas City, Kansas. A public availability session was held on August 8, 2006, at the Waterloo Public Library, Waterloo, Iowa. EPA representatives were available to answer questions about the draft permit. A public hearing was not held on the draft permit and one was not requested during the public comment period.

Since comments were filed, any commenter may petition the Environmental Appeals Board (EAB), pursuant to 40 CFR 124.19(a), to review any condition of the permit decision to the extent of their comments made during the comment period. Any person who failed to file comments may petition for administrative review only to the extent of the changes from the draft to the final permit. All petitions for review must be received by the EAB no later than 33 days from the date of this notice.

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The EAB may be reached by telephone at (202) 233-0122.

This summary of comments, prepared according to the requirements of 40 CFR 124.17, considers written comments received during the public comment period. The full text of comments is included in the administrative record. All comments were carefully reviewed. The following summarizes the written comments and sets out EPA's responses:

1. Comment: EPA's proposal does not involve Rock Island District Corps of Engineers (Corps) administered land: therefore, no further Rock Island District Corps real estate coordination is necessary.

Response: EPA acknowledges the comment and has determined that no revision to the permit is necessary.

2. Comment: Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army (DA) authorization. If the project involves a discharge of dredged or fill material into waters of the U.S., it would be covered under Item 38 of the nationwide permits.

Response: EPA acknowledges the comment and has determined that no revision to the permit is necessary. The corrective measure remedy for SWMU 19A and Area of Concern (AOC) 1, as described in Permit Condition III.R.1, does not propose placement of dredge or fill material into the waters of the U.S.

3. Comment: The Responsible Federal Agency should coordinate with Ms. Lavon Grimes, Iowa Historic Preservation Agency, ATTN: Review and Compliance Program, State Historical Society of Iowa, Capitol Complex, Des Moines, Iowa 50319, to determine impacts to historic properties.

Response: EPA notified Lavon Grimes, Iowa Historic Preservation Agency, of the draft permit. At the beginning of the public comment period, EPA mailed the Fact Sheet, dated July 2006, to Lavon Grimes at the following address: State Historical Society of Iowa Review and Compliance, 600 East Locust Street, Des Moines, Iowa 50319-0290. No revision to the permit is necessary.

4. Comment: The Rock Island Field Office of the U.S. Fish and Wildlife Service should be contacted to determine if any federally listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Rock Island Field Office address is: 4669 48th Avenue Court, Rock Island, Illinois, 61201. Mr. Rick Nelson is the Field Supervisor.

Response: EPA notified Robyn Thorson, Regional Director of the U.S. Fish and Wildlife Service, Region III, Great Lake – Big Rivers Region, of the draft permit. Region III includes the State of Iowa. At the beginning of the public notice period, EPA mailed the Fact Sheet, dated July 2006, to Robyn Thorson at the following address: U.S. Fish and Wildlife Service, Region III, 1 Federal Drive, BHW Federal Building, Fort Snelling, Minnesota. No revision to the permit is necessary.

5. Comment: In the draft Hazardous Waste Management Permit, on the cover page in paragraph four, the first statement should also mention the amended Part A Permit Application attached to Permittee's letter dated 11 April 2006. The reason is some information to the original Part A Permit Application submitted to the EPA in January 2001 is outdated. The amended Part A permit updates this information to make it current.

Response: EPA received and reviewed the amended Part A Permit Application attached to the Permittee's letter, dated April 11, 2006. The information in the amended Part A describes the new property area and new boundaries of the facility as a result of deeding over a portion of the John Deere property "scheduled for 01 July 2006". The deeding over of property has not occurred and the current facility property boundaries are not accurately reflected in the map attached to the amended Part A. The permit is issued based on the current conditions that are accurate at the time, and not on anticipated actions. Therefore, the EPA does not agree with the request to include a reference to the amended Part A Permit Application on the cover page of permit. EPA has determined that no revision to the permit is necessary.

6. Comment: In the draft Hazardous Waste Management Permit, on page II-1 under "II.B. REQUIRED NOTICES" it states that "The Permittee is prohibited from receiving hazardous wastes from off-site sources." This statement should be revised to say, "The Permittee is prohibited from receiving hazardous wastes from off-site sources, except for

the Permittee's wastewater treatment unit (WWTU) that meets the definition of a WWTU at 40 CFR 260.10. The Permittee's WWTU may receive hazardous wastes from off-site sources as a "designated facility." Please refer to Ms. Patricia Murrow's October 25, 2000, letter concurring with our WWTU status as a "designated facility" thus allowing the Permittee to accept hazardous wastes from off-site sources under mentioned conditions.

Response: EPA believes that this request is reasonable and the text in the final Permit Condition II.B.2. has been revised as follows: "The Permittee is prohibited from receiving hazardous waste from off-site sources, except for the Permittee's wastewater treatment unit (WWTU) that meets the definition of a WWTU at 40 CFR 260.10. The Permittee's WWTI may receive hazardous wastes from off-site sources as a "designated facility." The Table of Contents has also been revised accordingly.

7. Comment: In the draft Hazardous Waste Management Permit, on page III-1 under III.A. IDENTIFICATION OF AND REQUIREMENT FOR SOLID WASTE MANAGEMENT UNITS paragraph five states, "This Permit requires the Permittee to conduct further investigation and take corrective actions as deemed appropriate by the EPA on the releases or potential releases at the following SWMUs, AOCs, and releases at the facility." Please note corrective action has been implemented and is essentially complete for five SWMUs. These SWMUs are "7-Old Foundry Settling Ponds", 10B- Waste Casting Sand Disposal Area – Unit located to the immediate east of Black Hawk Creek", 12A – Paint Sludge Disposal Area – Unite located under SE corner of T-10 Building", 12B – Paint Sludge Disposal Area – Unit located adjacent to Former UST Tank Farm", 12C – Paint Sludge Disposal Area – Unit located to immediate NW of on-site power plant". These SWMUs should be removed from this list. Another list should be made itemizing the five SWMUs with a statement mentioning that the EPA has formally approved the already implemented corrective measures for each of these five SWMUs. Please refer to "Permit Attachment III-1 SWMU Locations" in draft Permit for identification of the five SWMUs locations.

Response: EPA does not agree with removing the five (5) SWMUs from the list of SWMUs, AOCs, and releases at the facility. A final remedy decision has not been issued by EPA for these five (5) SWMUs and therefore, the five (5) SWMUs are subject to the permit conditions. EPA has determined that no revision to Permit Condition III.A, Identification of and Requirements for Solid Waste Management Units, is necessary.

8. Comment: In the draft Hazardous Waste Management Permit, on page III-4 there is a spelling error. The error is the misspelled word "REQUIREMENTS" located at "III.D REPORTING REQUIREMENTS". The "O" should be a "Q".

Response: EPA agrees with this comment, and has revised Permit Condition III.D to read as follows: "REPORTING REQUIREMENTS".

9. Comment: In the draft Hazardous Waste Management Permit, on page III-23 at "III.R.1. Corrective Measures Implementation at Rubbish pit (SWMU 19A) and

Southeast Area of Concern (Southeast AOC1) "pit" should be capitalized. Also, the notification and written approval requirements involving routine maintenance of the existing production wells and in the repairs and/or replacement of well pumps, well motors, mechanical linkages, electrical wiring and components and recording and monitoring instruments as long as the replacement components are designed to perform essentially the same functions and follow the same performance levels as the original components. The reason for this is, overall well maintenance and repair and replacements for mentioned components would not materially affect any breach of barriers protecting the aquifer, and may actually add to the security of barriers. The reporting and approval burden should not be applied in these cases.

Response: EPA believes that the first request is reasonable and has made the requested revision to Permit Condition III.R.1. The word "pit" has been capitalized.

EPA believes that the second request to exclude the notification and written approval requirements is not acceptable. Well maintenance procedures will involve contact with the groundwater by the workers. Notification and approval by EPA will help to ensure that workers are not inadvertently exposed to potentially contaminated groundwater. EPA has determined that no revision to the permit is necessary.

10. Comment: At "Permit Attachment II-2 Facility Map" this map is already out of date. The map should be updated before the permit is issued to avoid the requirement to modify the permit as soon as it's issued. Also, a second map should be included to show how the site is projected to look in the fall of 2007 after several buildings are demolished the proposed roadway is constructed in the 43 acre TechWorks parcel. Also, the language in the first paragraph of Permit Attachment II-2 should be revised as not to require the Permittee to change the maps unless there is a material change on-site that would affect Permit performance by the Permittee or alter Permit conditions. This change is to relieve the EPA and the Permittee of the burden to perform unnecessary permit modifications at Attachment II-2.

Response: EPA does not agree with the request to remove the facility map in Permit Attachment II- 2 and replace it with an updated map before the permit is issued and also include a second map showing how the site is projected to look in the fall of 2007. The facility map in the permit must reflect the accurate conditions at the time the permit is issued. Pursuant to the provisions of 40 CFR 270.42, and Permit Condition I.B.2, the Permittee may request a modification of the Permit at any time.

EPA did remove the maps in Permit Attachment III -2 and III-3 and replace them with maps submitted to EPA by John Deere. The replacement maps, which are dated October 2006, illustrate the approximate boundary of Southeast AOC 1 and include this reference in the legend.

11. Comment: A citizen states that he received the Fact Sheet and is fine on how the EPA is proceeding with this action.

Response: EPA acknowledges the comment and has determined that no revision to the permit is necessary.

12. Comment: EPA comments that in the draft Hazardous Waste Permit under III.R.1.a.ii, Institutional Controls, it was stated that institutional controls would include restrictions of the future use of Southeast AOC 1 and SWMU 19A.

EPA's evaluation of exposure risks for the property is based on the Revised Technical Memorandum - Human Health Risk Evaluation for the Cedar Valley TechWorks Facility, dated April 2006. This risk assessment is based on industrial exposure levels and the intended use of the property as a technical training facility. The final remedy for Southeast AOC 1 and SWMU 19A provides that the property shall not be used for any purpose other than industrial, commercial, or adult educational uses, and specifically shall not be used for child care facilities.

Response: In Permit Condition III.R.1.a.ii.(h), EPA has added the following sentence: "Specifically, the property shall not be used for any purpose other than industrial, commercial, or adult educational uses, and specifically shall not be used for child care facilities." The Table of Contents has also been revised accordingly.

**FINAL DECISION AND RESPONSE TO COMMENTS
SWMU 19A AND SOUTHEAST AOC-1
JOHN DEERE WATERLOO WORKS, WATERLOO, IOWA**

INTRODUCTION

This Final Decision and Response to Comments is presented by the U.S. Environmental Protection Agency (EPA). The purpose of the Final Decision and Response to Comments is to present issues and concerns raised during the public comment period on the remedy proposed, provide responses to those issues and comments, and to identify the remedy the EPA has selected for solid waste management unit 19A (SWMU 19A) and an area of concern, designated Southeast Area of Concern number one (AOC-1) (see attached Figures 1-1 and 2); these figures show the boundary of the Southeast Area of Concern (AOC-1) in yellow and in the legend describe it as the Southeast AOC-1 Boundary (Approximate), and show the approximate location of SWMU 19A in orange. All comments received were carefully reviewed during the final selection of the remedy, and have been addressed in this document. No additional alternatives were proposed and the proposed remedy was not altered as a result of public comments. It should be noted that this final remedy decision applies to a discrete, specific area of the John Deere Waterloo Works facility, and additional corrective action activities will continue in other areas of the facility in the future under the facility's RCRA permit.

SELECTED REMEDY

The selected remedy for SWMU 19A and AOC-1 at the John Deere Waterloo Works facility is to (1) employ engineered controls in the form of engineered barriers to prevent human exposure through direct contact with the contaminated subsurface soils and waste foundry and casting sands, and (2) utilize institutional controls to effect land use restrictions in order to prevent human exposure to contaminated subsurface materials and potentially contaminated groundwater and to ensure adequate maintenance of the engineered barriers. This selected remedy is documented in this document, the Final Decision and Response to Comments, and also in the most recent RCRA permit to be issued to the John Deere Waterloo Works facility. Thus John Deere Waterloo Works will remain responsible for implementing the final remedy for SWMU 19A and AOC-1, both the engineered controls and the institutional controls. An environmental covenant created under the Iowa Uniform Environmental Covenant Act will be utilized to ensure that any new owner of the property will be bound by the requirements of this final remedy decision.

Engineered controls will consist of utilizing existing buildings and paved areas as substantial barriers to prevent exposure through direct contact of the contaminated subsurface soils and waste foundry and casting sands. A preference for the use of pavement or other means of providing a substantial barrier shall be employed during

planning of any new construction. Limited greenspace areas may be established if adequate clean soil backfill is put in place.

The use of institutional controls is a very significant component of the final remedy. The institutional controls will ensure that the engineered barriers will be maintained properly so that their effectiveness is assured. Institutional controls will also ensure that exposure to known and potentially contaminated subsurface materials will be prevented.

EPA's evaluation of exposure risks for the property is based on the Revised Technical Memorandum - Human Health Risk Evaluation for the Cedar Valley TechWorks Facility, dated April 2006. This risk assessment is based on industrial exposure levels and the intended use of the property as a technical training facility. This final remedy, and John Deere's RCRA Permit, provide that that the property shall not be used for any purpose other than industrial, commercial, or adult educational uses, and specifically shall not be used for child care facilities.

The institutional controls will include, at a minimum, the following elements:

- a. Surveyed areas showing the location of areas underlain by the contaminated soils and waste foundry and casting sands.
- b. Inspection and maintenance requirements for the engineered controls including requirements for periodic inspection, reporting and maintenance of the buildings, paved areas, and limited greenspace areas in order to ensure the effectiveness of the engineered barriers.
- c. An easement to allow long-term inspection and maintenance of the engineered barrier by John Deere and/or the EPA.
- d. An easement to allow John Deere and/or the EPA to perform any environmental sampling determined to be necessary for the protection of human health and the environment.
- e. Use of water produced from the two existing production wells will be limited to non-contact cooling water.
- f. No additional water production wells may be installed in the Southeast AOC-1. If maintenance or repair of the existing production wells is necessary, notification in advance must be provided to John Deere and the EPA, and written approval obtained from John Deere and the EPA prior to commencing the work.
- g. An easement to allow for inspection and sampling by John Deere and/or the EPA of any wells including the two existing production wells. This easement will also allow the future installation, maintenance, and sampling of groundwater monitoring wells, or use of alternate means of

collecting groundwater samples such as direct push technology, if necessary for the protection of human health and the environment.

- h. Restrictions on the future use of the Southeast AOC-1 and SWMU 19A. Specifically, the property shall not be used for any purpose other than industrial, commercial, or adult educational uses, and specifically shall not be used for child care facilities.
- i. Under the restrictive covenant and John Deere's RCRA permit, a procedure for obtaining prior approval from the EPA for any activity involving subsurface excavation, maintenance, or new construction within the area of the Southeast AOC-1 and SWMU 19A. This would be done in order to ensure (1) worker health and safety, (2) proper handling and management of contaminated excavated materials including soils and waste foundry/casting sand, and (3) that the integrity of the engineered barriers is maintained.

SUMMARY OF ALTERNATIVES

Besides the selected remedy, three other remedial alternatives were also evaluated as part of the Focused Corrective Measures Study (CMS) Report. These alternatives were as follows:

No Action:

Under this alternative the site would remain in its current state and no actions would be conducted to remediate, remove, or isolate the contamination, and no restrictions for use would be put in place.

In Situ Treatment (Chemical Oxidation):

This alternative would involve the addition of a chemical oxidizer into the contaminated soil and waste foundry/casting sand which would have the effect of reducing the mass of contaminants in the subsurface through chemical conversion into less toxic compounds. Because the presence of the existing buildings and underground utilities would greatly limit the accessibility of the subsurface for effective placement and mixing of the chemical oxidizer, the existing buildings, underground utilities, and pavement would need to be removed prior to treatment.

Excavation and Off-Site Disposal:

This alternative would involve excavation of all contaminated subsurface materials and transport to an approved off-site treatment and/or disposal facility. This alternative would require removal of all existing buildings, underground utilities, and pavement prior to implementation.

Each of these alternatives was evaluated against the four "General Standards for Corrective Measures", as detailed in the Statement of Basis. These four standards are as follows:

1. Overall Protection of Human Health and the Environment
2. Attain Media Cleanup Standards
3. Control the Sources of Releases
4. Comply with Standards for Management of Wastes

With the exception of the "No Action" alternative which was not able to meet these four general standards, the selected remedy, the in situ treatment alternative, and the excavation and off-site disposal alternative were then evaluated as detailed in the Statement of Basis with respect to the "balancing criteria", which consist of seven additional factors as follows:

1. Long-term Effectiveness
2. Reduction of Toxicity, Mobility, or Volume of Hazardous Wastes and Hazardous Constituents
3. Short-term Effectiveness
4. Implementability
5. Cost
6. Community Acceptance
7. State Acceptance

Based upon a comparison to the foregoing remedy selection factors, the EPA determined that, of the three alternatives that satisfy the four general standards for corrective measures, the proposed alternative of utilizing engineered barriers and institutional controls offered the best balance of cost and environmental protectiveness. As long as the use restrictions for the property remain as specified in the selected remedy, the remedy permits the maximum beneficial use of the property and existing buildings while preventing unacceptable exposure to contamination.

PUBLIC PARTICIPATION ACTIVITIES

A public comment period was held from July 21, 2006 through September 5, 2006, and a public availability session was held on August 8, 2006 at the Waterloo Public Library. A number of comments were received during the public comment period, and these comments along with EPA responses are presented below.

COMMENTS RAISED AND AGENCY RESPONSES

During the public comment period, the EPA received comments on the Statement of Basis. The following summarizes the comments and provides our responses.

1. Comment: EPA's proposal does not involve Rock Island District Corps of Engineers (Corps) administered land: therefore, no further Rock Island District Corps real estate coordination is necessary.

Response: EPA acknowledges the comment and has determined that no revision to the final remedy is necessary.

2. Comment: Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army (DA) authorization. If the project involves a discharge of dredged or fill material into waters of the U.S., it would be covered under Item 38 of the nationwide permits.

Response: EPA acknowledges the comment and has determined that no revision to the final remedy is necessary. The proposed remedy does not propose placement of dredged or fill material into waters of the U.S.

3. Comment: The Responsible Federal Agency should coordinate with Ms. Lavon Grimes, Iowa Historic Preservation Agency, ATTN: Review and Compliance Program, State Historical Society of Iowa, Capitol Complex, Des Moines, Iowa 50319, to determine impacts to historic properties.

Response: EPA notified Ms. Lavon Grimes, Iowa Historic Preservation Agency, of the proposed remedy. At the beginning of the public comment period, EPA mailed the Fact Sheet, dated July 2006, to Lavon Grimes at the following address: State Historical Society of Iowa Review and Compliance, 600 East Locust Street, Des Moines, Iowa 50319-0290. No revision to the final remedy is necessary.

4. Comment: The Rock Island Field Office of the U.S. Fish and Wildlife Service should be contacted to determine if any federally listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Rock Island Field Office address is: 4669 48th Avenue Court, Rock Island, Illinois, 61201. Mr. Rick Nelson is the Field Supervisor.

Response: EPA notified Robyn Thorson, Regional Director of the U.S. Fish and Wildlife Service, Region III, Great Lake-Big Rivers Region, of the proposed remedy. Region III includes the state of Iowa. At the beginning of the public notice period, EPA mailed the Fact Sheet, dated July 2006, to Robyn Thorson at the following address: U.S. Fish and Wildlife Service,

Region III, 1 Federal Drive, BHW Federal Building, Fort Snelling, Minnesota. No revision to the final remedy is necessary.

5. Comment: In the Statement of Basis document, under "II. FACILITY BACKGROUND" on page two and in paragraph two, the first statement should be amended to add the words "and west" as follows: Activities at the facility have included foundry operations in the area west of Black Hawk Creek, and metal working, finishing, and assembly operations in the areas east and west of Black Hawk Creek.

Response: EPA acknowledges and agrees with the comment. The correction is incorporated via this response, but does not form the basis to select a different final remedy. No revision to the final remedy is necessary.

6. Comment: In the Statement of Basis document, on page 3 in the third paragraph the "Waterloo Development Corporation" should be replaced with "Cedar Valley TechWorks, Inc."

Response: EPA acknowledges and agrees with the comment. The correction is incorporated via this response, but does not form the basis to select a different final remedy. No revision to the final remedy is necessary.

7. Comment: In the Statement of Basis document, on page 3 in paragraph four, several changes should be made to present more accurate information as follows.

- a. On line 2, Figure 3-1 could not be found in the "Statement of Basis" nor in the "Large Attachment". This figure may have been inadvertently omitted.

Response: The figure was mentioned in a discussion of the findings of the RFI; it was not intended to be attached to the Statement of Basis. EPA acknowledges and agrees that the original statement did not make this clear. The clarification is incorporated via this response, but does not form the basis to select a different final remedy. No revision to the final remedy is necessary.

- b. On line nine it mentions elevated levels of chromium. Lab results show no elevated levels of chromium in the 43 acre parcel. The words "and chromium" should be deleted on this line.

Response: The statement referred to in the comment is referring to the two borings that were sampled during the RFI, borings SB-

47 and SB-48. The results showed chromium at 67.3 mg/kg in boring SB-48 (RFI Report, Table 3-10) which is an elevated level when compared with other samples from the facility, including the results of background samples (RFI Report, Table 3-20). EPA has determined that no revision to the final remedy is necessary.

- c. On line ten the "42" acres should be changed to "43" acres to make the area description more accurate.

Response: EPA acknowledges and agrees with the comment. The correction is incorporated via this response, but does not form the basis to select a different final remedy. No revision to the final remedy is necessary.

- d. On line eleven the "Waterloo Development Corporation" should be changed to "Cedar Valley TechWorks, Inc".

Response: EPA acknowledges and agrees with the comment. The correction is incorporated via this response, but does not form the basis to select a different final remedy. No revision to the final remedy is necessary.

- e. On line 17 "Chromium" should be replaced with "Arsenic". Again, there were no elevated levels of chromium in the 43 acre parcel. However, there was one soil boring (SB-47) with elevated levels of Arsenic at two depths near SWMU 19A.

Response: The results showed chromium at 67.3 mg/kg in boring SB-48 (RFI Report, Table 3-10) which is an elevated level when compared with other samples from the facility, including the results of background samples (RFI Report, Table 3-20). EPA has determined that no revision to the final remedy is necessary.

- f. On line 18 "several detections" should be replaced with "one elevated level". Reason is only one soil boring exhibited a PCB concentration exceeding Region IX PRG's and that was at SB-127 near Westfield Avenue.

Response: Analytical data indicate that PCB compounds were detected in several borings (Phase II Environmental Site Assessment Report). While the levels may be less than risk-based action levels, the results do indicate the presence of PCBs in several locations, which is relevant knowledge of presence or absence of contamination when

characterizing the general environmental properties of an area. EPA has determined that no revision to the final remedy is necessary.

8. Comment: In the Statement of Basis document, on page 5 in paragraph 2 beginning in line 4 it states, "However, because groundwater in nearby areas of the John Deere Waterloo Works facility is known to contain groundwater contamination at levels exceeding health-based concentration levels and could potentially be captured by the two Southeast AOC-1 production wells, the uses of the water produced must be limited." John Deere's comment to this statement is that it has been shown through testing that there is no contamination of the groundwater in these areas. John Deere believes with existing and projected future Westfield Avenue Site conditions and with implementation of engineered barriers and institutional controls proposed in the Statement of Basis it's very unlikely contaminated groundwater will migrate to the well sites and even more unlikely that the contamination will find its way into the aquifer where these wells draw water from.

Response: While groundwater sampled from the area of the Southeast AOC-1 has not exhibited contamination, groundwater contaminated at concentrations exceeding health-based levels is present in areas adjacent to, and hydraulically connected with, the aquifer beneath the Southeast AOC-1. It is believed that operation of production wells in the areas adjacent to the Southeast AOC-1 is helping to prevent contamination from migrating toward the Southeast AOC-1. The EPA's concern is that under a scenario where the Southeast AOC-1 production wells are pumping and the wells in the contaminated areas are not, then the Southeast AOC-1 wells could begin to cause flow of the contaminated water toward them, potentially capturing the contaminated water and resulting in the production of contaminated water. Implementation of the engineered barriers and institutional controls of the selected remedy would have no effect in preventing this scenario from occurring. However, restricting the use of groundwater under the institutional controls will help to ensure that exposure to contaminated groundwater will not occur should the Southeast AOC-1 wells become contaminated. EPA has determined that no revision to the final remedy is necessary.

9. Comment: A citizen states that he received the Fact Sheet and is fine on how the EPA is proceeding with this action.

Response: EPA acknowledges the comment and has determined that no revision to the final remedy is necessary.

FUTURE ACTIONS

Under the RCRA permit, John Deere will be required to evaluate the effectiveness and performance of the remedy every five (5) years. Based upon the evaluation, the EPA may require John Deere to conduct additional investigation and/or study (an additional RFI and/or CMS) in order to modify the existing remedy or select a new remedy.

DECLARATIONS

Based on the administrative record compiled for this corrective action, I have determined that the selected remedy for the Southeast AOC-1 and SWMU 19A is appropriate and will be protective of human health and the environment.



Carol Kather
Acting Director
Air, RCRA, and Toxics Division

10/24/06

Date

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Commanding Officer
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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
PERMIT
FOR A HAZARDOUS WASTE MANAGEMENT FACILITY**

PERMITTEE: DEERE & COMPANY

FACILITY IDENTIFICATION NUMBER: IAD005289806

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 USC 6901 et seq. (RCRA), and regulations promulgated there under by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations [CFR]), a Permit is issued to the John Deere Waterloo Works facility (hereafter called the Permittee), for implementation of corrective action activities in Waterloo, Iowa at 400 Westfield Avenue and at latitude 42° 30' 012" N and longitude 092° 21' 005" W, known as the John Deere Waterloo Works Westfield Avenue Plant summarily described as follows:

This Permit is issued for the corrective action activities for the identified solid waste management units and areas of concern at the Westfield Avenue Plant. The Westfield Plant no longer has regulated hazardous waste management units, nor accepts hazardous waste from off-site. All the previous on-site permitted units have been either reclassified as Clean Water Act facilities or have been clean closed under RCRA.

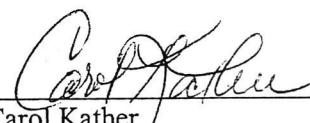
This Permit consists of the provisions (conditions) contained herein (including this Permit's attachments) and the applicable regulations contained in 40 CFR Parts 260 through 266, 268, 270, and 124, which are incorporated by reference. Applicable regulations are those which are in effect on the date of the issuance of the Permit, in accordance with 40 CFR § 270.32(c). The Permittee must comply with all terms and conditions of this Permit.

This Permit is based on the assumption that the information submitted in the Part A and B Permit Applications attached to the Permittee's letter dated January 18, 2001 (after referred to as the Application) is accurate and that the facility will be operated as specified in the Application. Any inaccuracies found in the submitted information may be grounds for the termination, revocation and reissuance, or modification of this Permit in accordance with 40 CFR § 270.41, 270.42, and 270.43, and for enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

The Regional Administrator has delegated authority to perform all actions necessary to issue, deny, modify, or revoke and reissue permits for owner and operators of hazardous waste treatment, storage, and disposal facilities pursuant to Section 3005 of RCRA to the Director of Region VII Air, RCRA, and Toxics Division (hereafter referred to as a "Director") or the Director's designated representative, by delegation NO. R7-8-6; January 1, 1995.

This Permit is issued at 12:01 a.m. as of the date below. Pursuant to 40 CFR § 124.15, this Permit shall become effective at 12:01 a.m. on Nov. 27, 2006, and shall remain in effect for ten (10) years from the effective date unless revoked and reissued under 40 CFR § 270.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 270.51(a) or (d).

10/24/06
Date



Carol Kather
Acting Director,
Air, RCRA and Toxics Division

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
MODULE I – GENERAL PERMIT CONDITIONS.....	I-1
I.A. EFFECT OF PERMIT	I-1
I.B. PERMIT ACTIONS	I-1
I.B.1. Permit Modification, Revocation and Reissuance, and Termination by EPA	I-1
I.B.2. Modification of the Permit by the Permittee	I-1
I.B.3. Permit Renewal	I-1
I.B.4. Permit Modifications.....	I-1
I.B.5. Permit Appeals.....	I-1
I.C. SEVERABILITY	I-2
I.D. DEFINITIONS	I-2
I.E. DUTIES AND REQUIREMENTS.....	I-2
I.E.1. Duty to Comply	I-2
I.E.2. Duty to Reapply	I-2
I.E.3. Permit Expiration	I-2
I.E.4. Need to Halt or Reduce Activity Not a Defense	I-2
I.E.5. Duty to Mitigate	I-3
I.E.6. Proper Operation and Maintenance.....	I-3
I.E.7. Duty to Provide Information	I-3
I.E.8. Inspection and Entry	I-3
I.E.9. Monitoring and Records.....	I-4
I.E.10. Reporting Planned Changes	I-4
I.E.11. Reporting Anticipated Noncompliance.....	I-5
I.E.12. Transfer of Permits.....	I-5
I.E.13. Twenty-Four Hour Reporting	I-5
I.E.14. Other Noncompliance	I-6
I.E.15. Other Information.....	I-6
I.F. SIGNATORY REQUIREMENT	I-6
I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE EPA.....	I-6
I.H. CONFIDENTIAL INFORMATION	I-7
I.I. DOCUMENTS TO BE MAINTAINED AT THE FACILITY	I-7
MODULE II – GENERAL FACILITY CONDITIONS.....	II-1
II.A. DESIGN AND OPERATION OF FACILITY	II-1
II.B. REQUIRED NOTICES	II-1
II.B.1. Hazardous Waste Imports	II-1
II.B.2. Hazardous Waste from Off-Site Sources	II-1
II.C. SECURITY	II-1
II.D. GENERAL INSPECTION REQUIREMENTS.....	II-1
II.E. PREPAREDNESS AND PREVENTION	II-1
II.E.1. Required Equipment.....	II-1
II.E.2. Testing and Maintenance of Equipment.....	II-1
II.E.3. Access to Communications or Alarm System.....	II-2

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
II.E.4. Arrangements with Local Authorities	II-2
II.F. MANIFEST SYSTEM.....	II-2
II.G. RECORDKEEPING AND REPORTING	II-2
II.G.1. Operating Record	II-2
II.G.2. Biennial Report	II-2
II.H. LAND DISPOSAL RESTRICTIONS	II-2
II.I. WASTE MINIMIZATION.....	II-2
II.I.1.	II-2
II.I.2.	II-2
II.I.3.	II-3
II.I.4.	II-3
II.J. AIR STANDARDS	II-3
II.J.1.	II-3
II.J.2.	II-3
II.J.3.	II-4
 MODULE III – CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS.....	III-1
III.A. IDENTIFICATION OF AND REQUIREMENT FOR SOLID WASTE MANAGEMENT UNITS.....	III-1
III.B. DEFINITIONS	III-2
III.C. STANDARD CONDITIONS	III-3
III.C.1.	III-3
III.C.2.	III-3
III.C.3.	III-3
III.C.4.	III-4
III.D. REPORTING REQUIREMENTS	III-4
III.D.1.	III-4
III.D.2.	III-4
III.E. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEW OR NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNITS OR AREAS OF CONCERN	III-4
III.E.1.	III-4
III.E.2.	III-4
III.E.3.	III-5
III.E.4.	III-5
III.E.5.	III-5
III.E.6.	III-5
III.F. NOTIFICATION REQUIREMENTS FOR RELEASES AT SWMUS	III-6
III.G. RCRA FACILITY INVESTIGATION (RFI) WORKPLAN	III-6
III.G.1.	III-6
III.G.2.	III-6
III.G.3.	III-6
III.G.4.	III-6
III.G.5.	III-7

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
III.H. RFI IMPLEMENTATION	III-7
III.H.1.	III-7
III.H.2.	III-7
III.I. RCRA FACILITY INVESTIGATION FINAL REPORT AND SUMMARY	III-7
III.I.1.	III-7
III.I.2.	III-8
III.I.3.	III-8
III.J. INTERIM MEASURES	III-8
III.J.1.	III-8
III.J.2.	III-8
III.K. CORRECTIVE MEASURES STUDY (CMS) WORKPLAN	III-9
III.K.1.	III-9
III.K.2.	III-9
III.K.3.	III-9
III.K.4.	III-9
III.L. CORRECTIVE MEASURES STUDY FINAL REPORT AND SUMMARY	III-9
III.L.1.	III-9
III.L.2.	III-10
III.L.3.	III-10
III.M. REMEDY SELECTION.....	III-10
III.N. REVIEW AND APPROVAL PROCEDURES	III-10
III.N.1.	III-10
III.N.2.	III-10
III.N.3.	III-11
III.N.4.	III-11
III.O. DISPUTE RESOLUTION.....	III-11
III.O.1.	III-11
III.O.2.	III-11
III.P. FUNDING FOR CORRECTIVE MEASURES IMPLEMENTATION - COST ESTIMATE AND FINANCIAL ASSURANCE.....	III-11
III.P.1.	III-11
III.P.2.	III-11
III.P.3.	III-12
III.P.4.	III-12
III.P.5.	III-13
III.P.6.	III-13
III.P.7.	III-14
III.P.8.	III-14
III.P.9.	III-14
III.P.10.	III-14
III.P.11.	III-14
III.P.12.	III-14
III.P.13.	III-15
III.P.14.	III-15
III.P.15.	III-15

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
III.P.16.	III-15
III.P.17.	III-15
III.P.18.	III-16
III.Q. GENERAL REQUIREMENTS OF INSTITUTIONAL CONTROLS	III-16
III.Q.1. Property Owned or Controlled by the Permittee	III-16
III.Q.2. Property Owned or Controlled by Persons Other Than the Permittee	III-18
III.Q.3.	III-19
III.Q.4.	III-20
III.Q.5. Reporting.....	III-20
III.R. CORRECTIVE MEASURES IMPLEMENTATION (CMI)	III-22
III.R.1. Corrective Measures Implementation at Rubbish Pit (SWMU 19A) and Southeast Area of Concern (Southeast AOC 1)	III-23

Permit Attachments

Permit Attachment II-1 Preparedness and Prevention Plan

Permit Attachment II-2 Facility Map

Permit Attachment III-1 SWMU Locations

Permit Attachment III-2 John Deere Waterloo Works

Permit Attachment III-3 SWMU 19A and Southeast AOC 1 Details

Permit Attachment III-4 Corrective Measures Implementation Scope of Work

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

MODULE I – GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The Permittee is allowed to perform corrective action activities in accordance with the conditions of the Permit. Subject to 40 § CFR 270.4, compliance with this Permit generally constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or an infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*, commonly known as CERCLA), or any other law providing for protection of public health or the environment.

I.B. PERMIT ACTIONS

I.B.1. Permit Modification, Revocation and Reissuance, and Termination by EPA

If at any time the EPA determines that modification, revocation and reissuance or termination of the Permit is necessary, the EPA may initiate a modification to the Permit, revocation and reissuance of the Permit or termination of the Permit in accordance with 40 CFR § 270.41 and 270.43. The initiation of a modification to the Permit, revocation or reissuance of the Permit or termination of the Permit does not stay the applicability or enforceability of any Permit Condition.

I.B.2. Modification of the Permit by the Permittee

Pursuant to the provisions of 40 CFR § 270.42, the Permittee may request a modification of the Permit at any time. The filing of a request for a permit modification or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any Permit Condition.

I.B.3. Permit Renewal

This Permit may be renewed as specified in 40 CFR § 270.30(b) and Permit Condition I.E.2. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

I.B.4. Permit Modifications

Modifications to the Permit do not constitute a reissuance of the Permit.

I.B.5. Permit Appeals

This Permit may be appealed pursuant to the provisions of 40 CFR § 124.19(a).

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

I.C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

I.D. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260, 264, 266, 268, and 270, unless this Permit specifically provides otherwise; where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "EPA" means the Air, RCRA, and Toxics Division Director of EPA Region VII, or his or her designee or authorized representative.

I.E. DUTIES AND REQUIREMENTS

I.E.1. Duty to Comply

The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit. Any Permit noncompliance, other than noncompliance authorized by an emergency Permit, constitutes a violation of RCRA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. [40 CFR § 270.30(a)]

I.E.2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new Permit at least 180 days prior to permit expiration. [40 CFR § 270.30(b)]

I.E.3. Permit Expiration

Unless revoked or terminated, this Permit shall be effective for a fixed term not to exceed ten years, except that, as long as EPA is the Permit-issuing authority, this Permit and all conditions here in will remain in effect beyond the Permit's expiration date, if the Permittee has submitted a timely, complete application and, through no fault of the Permittee, the EPA has not issued a new Permit.

I.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of the Permit. [40 CFR § 270.30(c)]

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

I.E.5. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR § 270.30(d)]

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operations of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [40 CFR § 270.30(e)]

I.E.7. Duty to Provide Information

The Permittee shall furnish to the EPA, within a reasonable time, any relevant information which the EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the EPA, upon request, copies of records required to be kept by this Permit. [40 CFR § 270.30(h)]

I.E.8. Inspection and Entry

Pursuant to 40 CFR § 270.30(i), the Permittee shall allow the EPA, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

- I.E.8.a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- I.E.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- I.E.8.c. Inspect, photograph, and/or record (audio and/or visual) at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- I.E.8.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

Notwithstanding any provision of this Permit, EPA retains the inspection and access authority which it has under RCRA and other applicable laws.

I.E.9. Monitoring and Records

- I.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the EPA. Laboratory methods shall be specified in accordance with Waste Management System; Testing and Monitoring Activities; Final Rule: Methods Innovation Rule and SW-846 Final Update IIIB. [40 CFR § 270.30(j)(1), 70 FR 34538, July 14, 2005,]
- I.E.9.b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this Permit, the certification required by 40 CFR § 264.73(b)(9), and records of all data used to complete the application for this Permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the EPA at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
- I.E.9.c. Pursuant to 40 CFR § 270.30(j)(3), records of monitoring information shall specify:
- i. The dates, exact place, and times of sampling or measurements;
 - ii. The individuals who performed the sampling or measurements;
 - iii. The dates analyses were performed;
 - iv. The individuals who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.

I.E.10. Reporting Planned Changes

The Permittee shall give notice to EPA as soon as possible of any planned physical alterations or additions which may impact any Solid Waste Management Units (SWMUs), Areas of Concern (AOCs) or the media contaminated by them.
[40 CFR § 270.30(l)(1)]

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

I.E.11. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.E.12. Transfer of Permits

This Permit may be transferred to a new owner or operator only after notice to EPA pursuant to 40 CFR § 270.40 and only if the Permit is modified or revoked and reissued pursuant to 40 CFR § 270.41 to identify the new Permittee and incorporate such other requirements as may be necessary. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270, and this Permit.

I.E.13. Twenty-Four Hour Reporting

I.E.13.a. The Permittee shall report to the EPA any noncompliance, imminent or existing hazard from a release of hazardous waste or hazardous constituents, or from a fire or explosion at the facility, which may endanger human health or the environment. The Permittee shall also report any fire or explosion at or near a hazardous waste management area. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:

- i. Information concerning the release of any hazardous waste or hazardous constituents that may endanger public drinking water supplies.
- ii. Information concerning the release or discharge of any hazardous waste, or hazardous constituents, or a fire or explosion at the facility, which could threaten the environment or human health outside the facility.

I.E.13.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.13.c. A written submission shall also be provided to EPA within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The EPA may waive the five-day written notice requirement in favor of a written report within 15 days.

I.E.14. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, Permit Conditions I.E.10 – I.E.13, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition I.E.13.

I.E.15. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the EPA, the Permittee shall promptly submit such facts or information.

I.F. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to or requested by the EPA, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §§ 270.11 and 270.30(k).

I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE EPA

All reports, notifications, or other submissions which are required by this Permit to be sent or given to the EPA should be sent by certified mail or given to:

US EPA Region VII
901 North 5th Street
Kansas City, Kansas 66101
Attn: Wray R. Rohrman, RCRA Corrective Action & Permits (RCAP) Branch
(913) 551-7543

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

EPA may specify an alternate person to receive any report, notification or submission without making a permit modification.

I.H. CONFIDENTIAL INFORMATION

In accordance with 40 CFR § 270.12, the Permittee may claim confidential any information required to be submitted by this Permit.

I.I. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility the following documents and all amendments, revisions and modifications to these documents:

1. Approved Permit Application, pursuant to 40 CFR § 270.2.
2. All other documents required by Permit Module I, Permit Condition I.E.9. and Permit Module III.

*** END OF PERMIT MODULE I ***

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

MODULE II – GENERAL FACILITY CONDITIONS

II.A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or nonsudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by 40 CFR § 264.31.

II.B. REQUIRED NOTICES

II.B.1. Hazardous Waste Imports

The Permittee is prohibited from receiving hazardous waste from a foreign source.

II.B.2. Hazardous Waste from Off-Site Sources

The Permittee is prohibited from receiving hazardous waste from off-site sources, except for the Permittee's wastewater treatment unit (WWTU) that meets the definition of a WWTU at 40 CFR 260.10. The Permittee's WWTU may receive hazardous waste from off-site sources as a "designated facility".

II.C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (c) and Permit Attachment II-1, Preparedness and Prevention Plan.

II.D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule set out in Permit Attachment II-1. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR § 264.15(c). Records of inspection shall be kept, as required by 40 CFR § 264.15(d).

II.E. PREPAREDNESS AND PREVENTION

II.E.1. Required Equipment

At a minimum, the Permittee shall maintain at the facility the equipment set forth in the Preparedness and Prevention Plan, Permit Attachment II-1, as required by 40 CFR § 264.32.

II.E.2. Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in Permit Condition II.H.1, as necessary, to assure its proper operation in time of emergency, as required by 40 CFR § 264.33.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

II.E.3. Access to Communications or Alarm System

The Permittee shall maintain access to the communications or alarm system, as required by 40 CFR § 264.34.

II.E.4. Arrangements with Local Authorities

The Permittee shall maintain arrangements with state and local authorities, as required by 40 CFR § 264.37. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

II.F. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of 40 CFR §§ 264.71, 264.72, and 264.76.

II.G. RECORDKEEPING AND REPORTING

In addition to the recordkeeping and reporting requirements specified elsewhere in this Permit, the Permittee shall do the following:

II.G.1. Operating Record

The Permittee shall maintain a written operating record at the facility, in accordance with 40 CFR § 264.73.

II.G.2. Biennial Report

The Permittee shall comply with the biennial reporting requirements of 40 CFR § 264.75.

II.H. LAND DISPOSAL RESTRICTIONS

The Permittee must comply with all regulations implementing the land disposal prohibitions (40 CFR Part 268). In addition, the Permittee must comply with all future requirements or regulations which implement the land disposal prohibition, because these requirements are self-implementing provisions of Hazardous Solid Waste Amendments (HSWA). In short, the Permittee must comply with all present and upcoming land disposal prohibitions unless the applicable treatment standard is met, the waste is exempt under 40 CFR § 268.1(c), or any other exemption in 40 CFR Part 268 applies.

II.I. WASTE MINIMIZATION

II.I.1. Pursuant to 40 CFR 264.7J(b)(9), and section 3005(h) of RCRA, 42 U.S.C. 6925(h), the Permittee must submit to the EPA, at least annually, a waste minimization certification. This certification and all accompanying documentation shall be submitted annually on each anniversary date of the effective date of this permit.

II.I.2. The Permittee must certify that:

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- II.I.2.a. A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and
 - II.I.2.b. The proposed method of treatment, storage or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment.
 - II.I.3. Within one hundred and eighty (180) days of the effective date of this Permit, the Permittee shall prepare and keep on site a Waste Reduction Impact statement. The Permittee shall include the following information in the Waste Reduction Impact statement:
 - II.I.3.a. An identification of the annual amount and types of hazardous waste that are generated;
 - II.I.3.b. For each waste stream, an identification of the source of generation of these hazardous wastes;
 - II.I.3.c. An analysis of technically and economically feasible hazardous waste reduction techniques for the facility, including a description of any techniques that were implemented since 1984, at a minimum; and
 - II.I.3.d. A program and schedule for implementing the feasible hazardous waste reduction techniques.
 - II.I.4. In conjunction with the annual certification required by Permit Conditions II.N.1 and II.N.2 above, the Permittee must submit an annual report to EPA on the status of waste reduction techniques, including those which have been implemented during the previous year and those specified in the Waste Reduction Impact statement required by Permit Condition II.N.3 above.
- II.J. AIR STANDARDS
- II.J.1. The Permittee shall comply with the requirements of 40 CFR Part 264 Subpart AA for air emissions from process vents associated with the distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous waste(s) with total organic concentrations of at least 10 parts per million by weight (ppmw), if these operations are conducted in: (1) units that are subject to the permitting requirements of 40 CFR Part 270, or (2) hazardous waste recycling units.
 - II.J.2. The Permittee shall comply with the requirements of 40 CFR Part 264 Subpart BB for air emissions from pumps, valves, compressors, sampling connecting systems, open-ended valves or lines, pressure relief devices, flanges, and other connectors that contain or contact hazardous waste(s) with total organic concentrations of at least 10 percent by weight.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- II.J.3. The Permittee shall comply with the requirements of 40 CFR Part 264 Subpart CC for air emissions from tanks, surface impoundments, and containers that contain or contact hazardous waste(s) with total organic concentrations of at least 500 parts per million by weight (ppmw).

*** END OF PERMIT MODULE II ***

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

MODULE III – CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS

III.A. IDENTIFICATION OF AND REQUIREMENT FOR SOLID WASTE MANAGEMENT UNITS

Section 3004(u) of the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §6924, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), and 40 CFR § 264.101, require that all permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit (SWMU), regardless of when waste was placed in the unit or whether the unit is closed. Those sections further require that permits issued under Section 3005 of RCRA contain a schedule of compliance for corrective action where corrective action cannot be completed prior to permit issuance and that such permits contain evidence of financial assurance for completing corrective action. Section 3004(v) authorizes the EPA to require that corrective action be taken by the facility owner or operator beyond the facility boundary when necessary to protect human health and the environment, unless the owner or operator demonstrates that permission to undertake such action, despite the owner/operator's best efforts, was denied. Section 3005(c)(3) of RCRA requires that each permit issued under Section 3005 of RCRA shall contain terms and conditions as the EPA determines necessary to protect human health and the environment.

The EPA conducted a RCRA Facility Assessment (RFA) to identify releases or potential releases from any SWMU at the facility. Based on the RFA, EPA required the Permittee in the June 1991 permit to conduct further investigations and take corrective action as deemed appropriate by the EPA on the releases or potential releases at the following SWMUs at the facility:

- Old Foundry Settling Ponds
- Skimmer Pond
- Waste Casting Sand Disposal Area
- Cyanide and Chromium Waste Disposal Area
- Paint Sludge Disposal Area
- Sludge Drying Ponds
- Former Settling Pond
- Carbide Pit
- Sludge Pit
- Waste Pit
- Rubbish Pits
- Building 1020 and 1021 Disposal Area
- West Disposal Area
- Underground Tanks

Subsequent to the issuance of the original permit, additional areas were identified as newly discovered SWMUs, newly discovered AOCs, or newly discovered releases requiring further investigation. Also, for previously identified SWMUs with multiple units, EPA added identifiers to specify each individual unit.

This Permit requires the Permittee to conduct further investigation and take corrective action as deemed appropriate by the EPA on the releases or potential releases at the following SWMUs, AOCs, and releases at the facility:

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

SWMUs Identified

- 7 – Old Foundry Settling Ponds
- 8 – Skimmer Pond
- 10A – Waste Casting Sand Disposal Area - Unit located west of Black Hawk Creek
- 10B – Waste Casting Sand Disposal Area - Unit located to immediate east of Black Hawk Creek
- 10C – Waste Casting Sand Disposal Area - Unit located at NE portion of the site: By H-Building
- 11 – Cyanide and Chromium Waste Disposal Area
- 12A – Paint Sludge Disposal Area - Unit located under SE corner of T-10 Building
- 12B – Paint Sludge Disposal Area - Unit located adjacent to Former UST Tank Farm
- 12C – Paint Sludge Disposal Area - Unit located to immediate NW of on-site power plant
- 12D – Paint Sludge Disposal Area - Unit located under H-Building (pie shaped)
- 12E – Paint Sludge Disposal Area - Unit located under H-Building (rectangular)
- 14 – Sludge Drying Ponds
- 15 – Former Settling Ponds
- 16 – Carbide Pit
- 17 – Sludge Pit
- 18 – Waste Pit
- 19A – Rubbish Pit
- 19B – Rubbish Pit/Chromium Rinse Water Spill - Unit located adjacent to J-4 and H- Building
- 20 – Building 1020 and 1021 Disposal Area
- 21 – West Disposal Area
- 22 – Electric Arc Furnace Baghouses
- 27 – Underground Tanks Areas

Areas of Concern Identified

- AOC 1 - Southeast Area of Concern
- AOC 2 - North Parking Lot Area
- AOC 3 - Underlying Media at J4 Container Storage Area
- AOC 4 - Underground Tanks Area

The SWMU and AOCs are identified in Permit Attachment III – 1, III – 2 , and III – 3.

III.B. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in RCRA and 40 CFR Parts 124, 260, 261, 264, 268, and 270, unless this Permit specifically provides otherwise. Where terms are not defined in RCRA, the regulations, the Permit or EPA guidances or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

“Facility” means all contiguous property under the control of the owner or operator.

“Release” means any spilling, leaking, pouring, emitting emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing , hazardous wastes or hazardous constituents).

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

“Solid waste management unit (SWMU)” means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

“Area of Concern (AOC)” means any area of the facility under the control or ownership of the owner or operator where a release to the environment of hazardous waste(s) or hazardous constituents has occurred is suspected to have occurred, or may occur, regardless of the frequency or duration of the release.

“Hazardous waste” means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. The term hazardous waste includes hazardous constituent as defined below.

“Hazardous constituent” means any constituent identified in Appendix VIII of 40 CFR Part 261 or any constituent identified in Appendix IX of 40 CFR Part 264.

III.C. STANDARD CONDITIONS

- III.C.1. Failure to submit the information required in this Permit, or falsification of any submitted information, is grounds for enforcement and/or termination of this Permit. The Permittee shall ensure that all plans, reports, notifications, and other submissions to the EPA required in this Permit are signed and certified in accordance with 40 CFR § 270.11. Three (3) copies of these plans, reports, notifications or other submissions shall be submitted to the EPA and sent by certified mail or hand delivered to:

US EPA, Region VII
901 North 5th Street
Kansas City, KS 66101

Attn: Wray R. Rohrman, RCRA Corrective Action & Permits (RCAP) Branch
(913) 551-7543

EPA may specify an alternate person to receive any report, notification or submission without making a permit modification.

- III.C.2. All plans and schedules required by the conditions of this Permit are, upon approval of the EPA, incorporated into this Permit by reference and become an enforceable part of this Permit. Any noncompliance with such approved plans and schedules shall constitute noncompliance with this Permit. Extensions of the due dates for submittals may be granted by the EPA in accordance with the Permit Condition I.B.2.
- III.C.3. If the EPA determines that further actions beyond those provided in this Permit, or changes to the requirements set forth herein, are warranted, the EPA will modify the Permit in accordance with 40 CFR § 270.41.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.C.4. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility or other location approved by the EPA during the term of this Permit, including the term of any reissued Permits.

III.D. REPORTING REQUIREMENTS

- III.D.1. The Permittee shall submit to the EPA a signed quarterly progress report covering all activities (e.g., SWMU Assessment, Interim Measures, RCRA Facility Investigation, Corrective Measures Study, and Corrective Measures Implementation) conducted pursuant to the provisions of this Permit Module. The reports shall be due on the thirtieth day after the end of each calendar quarter, beginning the first quarter after EPA requests the RFI Work Plan. These reports shall contain:

- III.D.1.a. A description of the work completed in that quarter;
- III.D.1.b. Summaries of all findings, including summaries of laboratory data;
- III.D.1.c. Summaries of all problems or potential problems encountered during the quarter and actions taken to rectify problems; and
- III.D.1.d. Projected work for the next quarter.

- III.D.2. Copies of other reports (e.g., inspection reports), drilling logs and laboratory data shall be made available to the EPA upon request.

III.E. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEW OR NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNITS OR AREAS OF CONCERN

- III.E.1. The Permittee shall notify the EPA in writing of any new or newly-identified SWMU(s) or AOC(s), discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than fifteen (15) calendar days after discovery. As used in this part of the Permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee or an EPA representative either, (1) visually observed evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment. The notification shall include, at a minimum, a unique sequential identification number, the location of the SWMU or AOC, and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.)
- III.E.2. After such notification, the EPA may request, in writing, that the Permittee prepare a SWMU Assessment Plan, a proposed schedule of implementation and completion of the Plan, and a SWMU Assessment Report for any additional SWMU(s) or AOC(s) discovered subsequent to the issuance of this Permit.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.E.3. Within ninety (90) calendar days after receipt of the EPA's request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan which shall include a discussion of past waste management practices at the unit, as well as a sampling and analysis program for groundwater, land surface and subsurface strata, surface water or air, as necessary to determine whether a release of hazardous waste including hazardous constituents from such unit(s) has occurred, or is occurring. The sampling and analysis program shall be capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste including hazardous constituents from the newly-discovered SWMU(s) or AOC(s) to the environment.
- III.E.4. The SWMU Assessment Plan will be reviewed and approved in accordance with the procedures set forth in Permit Condition III.N. herein. Upon approval thereof by EPA, the Permittee shall implement said plan in accordance with the schedules contained therein.
- III.E.5. The Permittee shall submit a SWMU Assessment Report to the EPA according to the schedule specified in the approved SWMU Assessment Plan. The SWMU Assessment Report shall present and discuss the information obtained from implementation of the approved SWMU Assessment Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU or AOC:
- III.E.5.a. The location of the new or newly-identified SWMU or AOC in relation to other SWMUs and regulated units;
 - III.E.5.b. The type and function of the unit;
 - III.E.5.c. The general dimensions, capacities, and structural description of the unit;
 - III.E.5.d. The period during which the unit was or will be operated;
 - III.E.5.e. The physical and chemical properties of all wastes that have been or are being managed at the SWMU or AOC, to the extent available;
 - III.E.5.f. The results of any sampling and analysis conducted;
 - III.E.5.g. Past and present operating practices;
 - III.E.5.h. Previous uses of area occupied by the SWMU or AOC;
 - III.E.5.i. Amounts of waste handled; and
 - III.E.5.j. Drainage areas near the SWMU(s) or AOC(s).
- III.E.6. Based on the results of this Report, the EPA will determine the need for further investigations at specific unit(s) covered in the SWMU Assessment. If the EPA determines that such investigations are needed, the EPA may require the Permittee to prepare and submit for approval a plan for such investigations. This plan will be

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

reviewed for approval in accordance with Permit Condition III.N. Upon approval thereof, by EPA, the Permittee shall implement the plan in accordance with the schedule contained therein.

III.F. NOTIFICATION REQUIREMENTS FOR RELEASES AT SWMUS

The Permittee shall notify the EPA, in writing, of any release(s) of hazardous waste, including hazardous constituents, discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken after issuance of this Permit, no later than fifteen (15) calendar days after discovery.

The EPA may require further investigation of the newly-identified release(s) as well as a RCRA Facility Investigation work plan for conducting such investigation. The work plan will be reviewed and approved in accordance with Permit Condition III.N. Upon approval thereof by the EPA, the Permittee shall implement the work plan in accordance with the schedules contained therein.

III.G. RCRA FACILITY INVESTIGATION (RFI) WORKPLAN

III.G.1. The Permittee shall prepare and submit to EPA within ninety (90) calendar days of notification by EPA, a RCRA Facility Investigation (RFI) Work plan for those units identified under Permit Condition III.E.6. The RFI Work Plan(s) shall be developed to meet the requirements of Permit Conditions III.G.2 and III.G.3.

III.G.2. The RFI Work Plan shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the nature, direction, extent, rate, movement, and concentration of releases of hazardous waste including hazardous constituents from specific SWMUs or groups of SWMUs, and their actual or potential receptors. The RFI Work Plan shall detail all proposed activities and procedures to be conducted at the facility, a description of current conditions, the schedule for implementing and completing such investigations, and for submission of reports including the final RFI Report, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the RFI.

III.G.3. The RFI Work Plan shall include the submittal of a Quality Assurance Project Plan (QAPP). The QAPP shall present the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to achieve the data quality goals of the RFI. It shall include the RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures, health and safety procedures, and data review, validation and reporting procedures.

III.G.4. Development of the RFI Work Plan and reporting of data shall be consistent with the following EPA, guidance documents or the equivalent thereof:

III.G.4.a. RCRA Facility Investigation Guidance Document (EPA 530/SW-89-031);

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

III.G.4.b. RCRA Groundwater Monitoring Technical Enforcement Guidance Document (OSWER 9950.1) September 1986; and

III.G.4.c. Test Methods for Evaluating Solid Waste (SW-846).

III.G.5. Each RFI Work Plan will be reviewed and approved in accordance with the procedures set forth in Permit Condition III.N. herein.

III.H. RFI IMPLEMENTATION

Upon receipt of written approval from the EPA for any RFI Work Plan, the Permittee shall implement the RFI according to the schedules and in accordance with the approved RFI Work Plan and the following.

III.H.1. The Permittee shall notify EPA at least thirty (30) days prior to any sampling, testing, or monitoring activity required by this Permit Module to give Agency personnel the opportunity to observe investigation procedures and/or split samples.

III.H.2. Deviations from the approved RFI Work Plan which are necessary during implementation of the investigations must be approved by the EPA and fully documented and described in the progress reports and in the RFI Final Report.

III.I. RCRA FACILITY INVESTIGATION FINAL REPORT AND SUMMARY

III.I.1. The Permittee shall submit an RFI Report according to the schedule contained in the approved RFI Work Plan. The RFI Report shall present all information gathered under the approved RFI Work Plan along with a brief facility description and map showing the property boundary and all SWMUs and AOCs. The RFI Report must contain adequate information to support further corrective action decisions at the facility. The RFI Report shall describe the procedures, methods, and results of all investigations of SWMUs and AOCs and their releases, including but not limited to the following:

III.I.1.a. Characterization of the extent, nature, direction, rate, movement and concentration of releases from the facility.

III.I.1.b. Characterizations of the environmental setting at the facility, including:

- i. Hydrogeological conditions;
- ii. Climatological conditions;
- iii. Soil characteristics;
- iv. Surface water and sediment quality; and
- v. Air quality and meteorological conditions.

III.I.1.c. Characterization of SWMUs and AOCs from which releases have been or may be occurring, including unit and waste characteristics.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.I.1.d. Descriptions of humans and environmental systems which are, may have been, or, based on site-specific circumstances, may be exposed to release(s).
- III.I.1.e. Information that will assist the EPA in assessing risks to human health and the environment from releases from solid waste management units.
- III.I.1.f. Extrapolations of future contaminant movement.
- III.I.1.g. Laboratory, bench-scale or pilot-scale tests or studies to determine the feasibility or effectiveness of treatment technologies or other technologies that may be appropriate in implementing remedies at the facility.
- III.I.1.h. Statistical analyses to aid in the interpretation of data.
- III.I.1.i. Results of any interim measures.
- III.I.2. The Permittee shall submit an RFI Summary with the RFI Final Report. The Summary shall summarize the RFI Final Report.
- III.I.3. After the Permittee submits the RFI Report, the EPA will review the RFI Report for approval in accordance with the procedures set forth in Permit Condition III.N. herein.

III.J. INTERIM MEASURES

- III.J.1. If the Permittee becomes aware of a situation that may require interim measures to protect human health or the environment, he shall notify the EPA within 24 hours of the time the Permittee becomes aware of the situation.
- III.J.2. If, during the course of any activity initiated under this Permit, the EPA determines that a release or potential release of hazardous waste including hazardous constituents from a SWMU or AOC poses a threat to human health or the environment, the EPA may require interim measures. The EPA will determine the specific action(s) that must be taken to implement the interim measure, including potential permit modifications and the schedule for implementing the required measures. The EPA will notify the Permittee in writing of the requirement to perform such interim measures. The EPA may modify the Permit in accordance with the procedures set forth in Permit Condition I.B.1 of this Permit. If interim measures are not specified by the EPA, the EPA may specify a date by which the Permittee shall submit an Interim Measures Work Plan that describes the interim measure(s) the Permittee proposes. The Interim Measures Work Plan will be reviewed for approval in accordance with the procedures set forth in Permit Condition III.N. Upon approval thereof by EPA, the Permittee shall implement the Interim Measures Work Plan according to the schedules therein.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

III.K. CORRECTIVE MEASURES STUDY (CMS) WORKPLAN

- III.K.1. If the EPA determines that there has been a release of hazardous waste and/or hazardous constituents from a SWMU or AOC that may present a threat to human health or the environment given site-specific exposure conditions, the EPA may require a CMS and will notify the Permittee in writing. This notice will identify the hazardous constituent(s) of concern and may also specify remedial alternatives to be evaluated by the Permittee during the CMS.
- III.K.2. The Permittee shall submit a CMS Work Plan to the EPA within forty-five (45) calendar days of notification of the requirement to conduct a CMS. The CMS may be required to be conducted concurrent with any of the RFI Work Plans.
- III.K.3. The CMS Work Plan shall provide the following information:
 - III.K.3.a. A description of the general approach to investigating and evaluating potential remedies;
 - III.K.3.b. A definition of the specific objectives of the study;
 - III.K.3.c. Description of the remedies which will be studied;
 - III.K.3.d. The specific plans for evaluating remedies to ensure compliance with remedy standards;
 - III.K.3.e. The schedules for conducting the study and submitting a Corrective Measures Study Report; and
 - III.K.3.f. The proposed format for the presentation of information.
- III.K.4. The EPA will review the CMS Work Plan for approval in accordance with the procedures set forth in Permit Condition III.N herein. Upon approval thereof by EPA, the Permittee shall implement the plan in accordance with the schedule contained therein.

III.L. CORRECTIVE MEASURES STUDY FINAL REPORT AND SUMMARY

- III.L.1. The Permittee shall submit a CMS Final Report according to the schedule contained in the approved CMS Work Plan. The CMS Final Report shall present all information gathered under the approved CMS Work Plan. The CMS Final Report shall summarize the results of the investigations for each remedy studied and of any bench-scale or pilot tests conducted. The CMS Final Report shall include, but not be limited to, the following information:
 - III.L.1.a. Evaluation of performance, reliability, ease of implementation, and potential impacts of each remedy studied, including safety impacts, cross media impacts, and control of exposure to any residual contamination.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.L.1.b. Assessment of the effectiveness of each remedy in achieving adequate control of sources and cleanup of the hazardous waste or constituents released from solid waste management units.
 - III.L.1.c. Assessment of the time required to begin and complete each remedy.
 - III.L.1.d. Estimation of the costs of implementing each remedy.
 - III.L.1.e. Recommendation of remedy and rationale for selection.
 - III.L.1.f. Assessment of institutional requirements, such as state or local permit requirements, or other environmental or public health requirements which may substantially affect implementation of the remedy.
 - III.L.1.g. The EPA may require the Permittee to evaluate as part of the corrective measure study one or more specific potential remedies. These remedies may include a specific technology or combination of technologies that, in the EPA's judgment, achieves the standards for protection of human health and the environment.
 - III.L.1.h. The CMS Final Report must contain adequate information to support the EPA in the remedy selection decision making process, described under Permit Condition III.M.
- III.L.2. The Permittee shall submit a CMS Summary with the CMS Final Report. The Summary shall summarize the RFI Final Report.
 - III.L.3. The CMS Final Report and Summary will be reviewed in accordance with the procedures set forth in Permit Condition III.N herein.

III.M. REMEDY SELECTION

The EPA will select a remedy from the remedial alternatives evaluated in the CMS that will (1) be protective of human health and the environment; (2) control the source(s) of release(s) so as to reduce or eliminate, to the maximum extent practicable, further releases that might pose a threat to human health and the environment; and (3) meet all applicable federal, state, and local laws and regulations. After EPA selects the remedy, a Class 3 Permit modification will be initiated pursuant to 40 CFR §§ 270.41 or 270.42, as applicable.

III.N. REVIEW AND APPROVAL PROCEDURES

- III.N.1. After submission of any plan or report, the EPA will either approve or disapprove the plan or report in writing. The Permittee shall implement all approved plans according to the schedule contained in the plan.
- III.N.2. If the EPA disapproves the plan or report, the EPA will notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised plan or report.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

III.N.3. If the EPA also disapproves the revised plan or report, the EPA will modify the plan or report and notify the Permittee of the modifications. The plan or report as accepted or modified by the EPA is the approved plan or report, and shall become part of this Permit Module.

III.N.4. If the Permittee takes exception to the modifications made by the EPA, the Permittee shall follow the dispute resolution procedures in Permit Condition III.O.

III.O. DISPUTE RESOLUTION

III.O.1. If the Permittee disagrees, in whole or in part, with any EPA disapproval, modification, or other decision or directive made by EPA pursuant to this Permit, the Permittee shall notify EPA in writing of his or her objections and bases for them within (10) calendar days of receipt of EPA's disapproval, decision, or directive. The notice shall set forth specific points of the dispute, the position the Permittee maintains should be adopted as consistent with the requirements of this Permit, the factual and legal basis for the Permittee's position, and all matters the Permittee considers necessary for EPA's determination. EPA and the Permittee shall then have an additional twenty (20) days from EPA's receipt of the Permittee's objection to attempt to resolve the dispute. If agreement is reached, the resolution will be reduced to writing by EPA and shall become part of this Permit. If the parties are unable to reach complete agreement within this 20 day period, the matter will be submitted to the RCRA Branch Chief or representative of the RCRA Branch Chief who has not been previously involved in consideration or issuance of this Permit for resolution. This resolution shall become part of this Permit Module.

III.O.2. The existence of a dispute as defined herein and EPA's consideration of such matters as placed in dispute shall not excuse, toll or suspend any obligation or deadline required pursuant to this Permit, that is not the subject of dispute, during pendency of the dispute resolution process.

III.P. FUNDING FOR CORRECTIVE MEASURES IMPLEMENTATION - COST ESTIMATE AND FINANCIAL ASSURANCE

III.P.1. Within thirty (30) days after this permit has been issued and/or modified to include a final remedy decision in accordance with permit condition III.M, Remedy Selection, the Permittee shall submit to EPA for review and approval a detailed written initial estimate, in current dollars, of the cost of hiring a third party to perform the Work. The initial cost estimate must account for the total costs of the Work for the entire period of this Permit, including any necessary long term costs, such as operation and maintenance costs and monitoring costs. A third party is a party who is neither a parent nor a subsidiary of Respondent, and does not share a common parent or subsidiary with Respondent. The cost estimate must not incorporate any salvage value that may be realized from the sale of wastes, Facility structures or equipment, land or other assets associated with the Facility.

III.P.2. While this Permit is in effect, the Permittee must annually adjust the cost estimate for inflation within thirty (30) days after the close of the Permittee's fiscal year. In

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

addition, the Permittee must adjust the cost estimate if EPA determines that any additional work is required or if any other condition increases the cost of the Work.

- III.P.3. In order to secure the completion of the Work, the Permittee shall establish financial assurance for EPA's benefit. Concurrently with the Permittee's submission of the initial cost estimate required above, the Permittee shall submit draft financial assurance instruments for EPA's review and approval. Within sixty (60) days after EPA's approval of both the initial cost estimate and the draft financial assurance instruments, whichever date is later, the Permittee shall establish financial assurance in an amount at least equal to the initial cost estimate approved by EPA.
- III.P.4. The Permittee may use any of the instruments generally described below. Any and all financial assurance instruments provided pursuant to this Permit shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion.
- III.P.4.a. A trust fund administered by a trustee which is an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a U.S. Federal or State agency and that is acceptable to EPA. The trust agreement shall provide that the trustee shall make payments from the fund as EPA directs in writing to: (i) reimburse the Permittee from the fund for expenditures made by the Permittee for Work performed; or (ii) pay any other person whom EPA's Project Coordinator determines has performed or will perform the Work.
- III.P.4.b. A surety bond unconditionally guaranteeing performance of the Work, or guaranteeing payment at the direction of EPA into a standby trust fund that meets the requirements of the trust fund in Permit Condition III.P.4.a. above. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal Bonds as set forth in Circular 570 of U.S. Department of the Treasury, and acceptable to EPA.
- III.P.4.c. One or more irrevocable letters of credit, payable at EPA's direction, into a standby trust fund that meets the requirements of the trust fund in Permit Condition III.P.4.a. above. The letter(s) of credit must be issued by one or more financial institution(s) that have the authority to issue letters of credit, whose letter-of-credit operations are regulated and examined by a U.S. Federal or State agency, and that are acceptable to EPA.
- III.P.4.d. A policy of insurance that is issued by an insurance carrier that is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in Iowa, and governed by terms and conditions acceptable to EPA. The insurance policy must be issued for a face amount at least equal to the current cost estimate for the Work, except where costs not covered by the insurance policy are covered by another financial assurance instrument, as permitted in paragraph IV.P.7 of this Section. The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy, except for

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

the failure to pay the premium. If there is a failure to pay the premium, the insurer may cancel the policy by sending a notice of cancellation by certified mail to Respondent and EPA's Project Coordinator, except that cancellation, termination or failure to renew may not occur during the 120 days beginning with the date of receipt of the notice by both EPA's Project Coordinator and the Permittee. The policy must provide that the insurer shall make payments as EPA may direct in writing to: (i) reimburse the Permittee for expenditures made by the Permittee for Work performed; or (ii) pay any other person whom EPA determines has performed or will perform the Work, up to an amount equal to the face amount of the policy.

III.P.4.e. A written guarantee, executed in favor of EPA by one or more parent companies or subsidiaries of the Permittee, or by one or more unrelated companies that have a substantial business relationship with the Permittee to perform the Work or to establish a trust fund as permitted by Permit Condition III.P.4.a.; provided, however, that any company providing such a guarantee must demonstrate to EPA's satisfaction that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the costs for the work that it proposes to guarantee; or

III.P.4.f. A written guarantee, executed in favor of EPA by the Permittee, to perform the work in accordance with this Permit or to establish a trust fund as permitted by Permit Condition III.P.4.a.; provided, however, that the Permittee must demonstrate to EPA's satisfaction that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the costs of the Work that it proposes to guarantee.

III.P.5. For the purposes of the financial test guarantees described in Permit Conditions III.P.4.e and III.P.4.f. above, references in 40 C.F.R. § 264.143(f) to "the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates" shall mean "the sum of all environmental remediation obligations (including obligations under CERCLA, RCRA, UIC, PCB, TSCA, and any other state or tribal environmental obligation) guaranteed by such company or for which such company is otherwise financially obligated" in addition to the cost of the Work to be performed in accordance with this Permit.

III.P.6. If the Permittee seeks to post financial assurance for completion of the Work by means of a guarantee pursuant to subparagraph III.P.4.e. or III.P.4.f. of this Permit Section, the Permittee shall also comply with the other requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1), relating to the financial test and corporate guarantee: (a) the initial submission of required reports and statements from the guarantor's chief financial officer and independent certified public accountant; (b) the annual re-submission of such reports and statements within ninety (90) days after the close of each of the guarantor's fiscal years; and (c) the notification of EPA within ninety (90) days after the close of any of the guarantor's fiscal years in which any such guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1). EPA reserves the

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

right to request additional information (including financial statements and accountant's reports) from the Permittee or corporate guarantor at any time.

- III.P.7. The Permittee may combine more than one mechanism to demonstrate financial assurance for the Work to be performed in accordance with this Permit, except that mechanisms guaranteeing performance rather than payment may not be combined with other instruments.
- III.P.8. The original financial assurance instrument(s) provided pursuant to this Permit (including, without limitation, the original versions of letters of credit and other negotiable instruments issued for EPA's benefit) shall be submitted by the Permittee to EPA's Project Coordinator.
- III.P.9. In the event that EPA determines at any time that the financial assurances provided pursuant to this Permit Section are inadequate, or in the event that the Permittee becomes aware of information indicating that any financial assurances provided pursuant to this Permit Section no longer satisfy the requirements set forth herein (including, without limitation, that any third-party provider of such assurances such as a surety, trustee, financial institution, insurer, and/or any guarantor no longer qualifies to provide such assurances or the amount provided for in such financial assurance instrument becomes inadequate), then the Permittee shall, within thirty (30) days of receipt of notice of EPA's determination or, as the case may be, within thirty (30) days of becoming aware of such information, obtain and present to EPA for approval a revised form of financial assurance (and otherwise acceptable under this Permit Section) that covers such cost increase.
- III.P.10. Whenever the adjusted estimate for the cost of completing the remaining Work exceeds the amount of financial assurances already provided pursuant to this Permit Section, the Permittee shall, within thirty (30) days following such determination, obtain and present to EPA for approval a revised form of financial assurance (and otherwise acceptable under this Permit Section) that covers such cost increase.
- III.P.11. The Permittee's inability to post financial assurance for the completion of the Work shall in no way excuse performance of any other requirements of this Permit, including, without limitation, the Permittee's obligation to complete the Work.
- III.P.12. Any and all financial assurance instruments provided pursuant to subparagraphs b, c, d or e of permit condition IV.P of this Permit Section shall be automatically renewable at the time of their expiration unless the financial assurance provider has notified both the Permittee and EPA's Project Coordinator at least 120 days prior to cancellation of the instrument. Furthermore, if the Permittee has failed to provide alternate financial assurance and obtain EPA's written approval for such financial assurance within ninety (90) days following receipt of such notice by both the Permittee and EPA's Project Coordinator, then EPA's Project Coordinator will so notify the financial assurance provider in writing prior to the expiration of the instrument, and the financial assurance provider shall immediately deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument for the performance of the Work required pursuant to this Permit.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.P.13. Any and all financial assurance instruments provided pursuant to this Permit shall provide for timely payment, as directed by EPA, or performance of the Work, or a combination of payment and Work, in the event that EPA determines that the Permittee has: (i) ceased implementation of any portion of the Work; (ii) is significantly or repeatedly deficient or late in its performance of the Work; or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment. EPA's Project Coordinator will notify in writing both the Permittee and the financial assurance provider of such a determination, and the financial assurance provider shall, within thirty (30) days of the Permittee's receipt of such notice, deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument for the performance of the Work.
- III.P.14. The Permittee may invoke the procedures set forth in Permit Section III.O (Dispute Resolution), to dispute EPA's determination that any of the circumstances described in clauses (i), (ii), or (iii) of Permit Condition III.P.13. have occurred. Invoking the dispute resolution provisions shall not excuse, toll or suspend the obligation of the financial assurance provider, under Permit Condition III.P.13., to fund the trust fund, but if the Permittee disputes EPA's determination under Permit Condition III.P.13, EPA will not direct the trustee to make any payments from the trust fund, pending resolution of the dispute.
- III.P.15. If EPA has determined that any of the circumstances described in clauses (i), (ii), or (iii) of Permit Condition III.P.13 have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the Work in accordance with this Permit from the financial assurance provider pursuant to this Permit, then, upon receiving written notice from EPA, The Permittee shall within ten (10) days thereafter deposit into the standby trust fund, or a newly created trust fund approved by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount equal to the estimated cost of the remaining Work to be performed as of such date, as determined by EPA.
- III.P.16. Reduction of Amount of Financial Assurance. If the Permittee believes that the estimated cost to complete the remaining Work has diminished below the amount covered by the existing financial assurance provided under this Permit, the Permittee may, on any anniversary date of the effective date of this Permit, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Permit Section to the estimated cost of the remaining Work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining Work to be performed and the basis upon which such cost was calculated. The decision whether to approve a proposal to reduce the amount of financial assurance shall be within EPA's sole discretion and EPA will notify the Permittee of its decision regarding such a proposal in writing. The Permittee may reduce the amount of the financial assurance only after receiving EPA's written decision and only in accordance with and to the extent permitted by such written decision.
- III.P.17. Change of Form of Financial Assurance. If the Permittee desires to change the form of financial assurance, the Permittee may, on any anniversary of the effective date of

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

this Permit, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. Such a proposal shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated, and a detailed description of the proposed revised form of financial assurance. The decision whether to approve a proposal to change the form of financial assurance shall be within EPA's sole discretion. EPA will notify the Permittee of its decision regarding such a proposal in writing. After receiving EPA's written acceptance, the Permittee may change the form of financial assurance in accordance with and to the extent permitted by such written acceptance.

- III.P.18. Release of Financial Assurance. The Permittee may submit a written request to EPA's Project Coordinator that EPA release the Permittee from the requirement to maintain financial assurance under this Permit Section when the Permittee demonstrates in writing and certifies to the satisfaction of EPA that all activities required under this Permit, including any additional work, have been performed and EPA has approved. The provider of the financial assurance may be released from its obligations under the instrument only upon a written release from EPA's Project Coordinator.

III.Q. GENERAL REQUIREMENTS OF INSTITUTIONAL CONTROLS

Institutional Controls (ICs) are non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy. ICs are used when residual contamination remains at a level that does not allow for unlimited use and unrestricted exposure after the final remedy has been implemented.

To ensure that unacceptable threats to human health and the environment are prevented, ICs shall be implemented as a component of final remedies selected pursuant to Permit Condition III.M. of the Permit where residual contamination remains onsite and/or off-site at a level that does not allow for unrestricted use and unlimited exposure. The Permittee shall not modify or terminate any ICs or implementation actions nor modify land use without approval by EPA. Additional general elements of these ICs are included below.

III.Q.1. Property Owned or Controlled by the Permittee

If the Facility, or any other property where access and/or land/water use restrictions are needed to implement a final remedy selected, described under Permit Condition III.M, is owned or controlled by the Permittee, the Permittee shall:

- III.Q.1.a. Commencing on the effective date of this Permit, or the effective date of a permit modification, described under Permit Condition III.M, Remedy Selection, the Permittee shall provide to EPA, the State, and their representatives, including contractors, access at all reasonable times to the Facility, or such other property, for the purpose of conducting any activity related to this Permit including, but not limited to, the following:

- i. Monitoring the Work;

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- ii. Verifying any data or information submitted to EPA;
 - iii. Conducting investigations relating to contamination at or near the Facility;
 - iv. Obtaining samples;
 - v. Assessing the need for, planning, or implementing additional response actions at or near the Facility;
 - vi. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by the Permittee or its agents;
 - vii. Assessing the Permittee's compliance with this Permit; and
 - viii. Determining whether the Facility or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Permit;
- III.Q.1.b. Commencing on the effective date of this Permit, or the effective date of a permit modification, described under Permit Condition III.M, refrain from using the Facility, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the corrective measures to be implemented pursuant to this Permit; and
- III.Q.1.c. Execute and record in the Recorder's Office (or other appropriate land records office) of Black Hawk County, Iowa, an easement, restrictive covenant, or other appropriate instrument ("instrument") that runs with the land, and grants to a third party acceptable to EPA, and to EPA as a third-party intended beneficiary, the right to enforce any land/water use restrictions required by this Permit, or other restrictions that EPA determines are necessary to ensure non-interference with, or ensure the protectiveness of, the final remedy to be implemented pursuant to this Permit.
- III.Q.1.d. Within thirty (30) days of EPA's final remedy decision, the Permittee shall submit to EPA for review and approval with respect to such property:
- i. a draft instrument that is enforceable under the laws of the State of Iowa; and
 - ii. a current title insurance commitment or some other evidence of title acceptable to EPA, which shows title to the land described in the instrument to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, the Permittee is

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

unable to obtain release or subordination of such prior liens or encumbrances).

III.Q.1.e. Within fifteen (15) days of EPA's approval and acceptance of the instrument and title evidence, the Permittee shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment to adversely affect title, record the instrument with the Recorder's Office (or other appropriate land records office) of Black Hawk County, Iowa.

III.Q.1.f. Within forty-five (45) days of recording the instrument, the Permittee shall provide to EPA a final title insurance policy, or other final evidence of title acceptable to EPA, and a certified copy of the original recorded instrument showing the clerk's recording stamps.

III.Q.2. Property Owned or Controlled by Persons Other Than the Permittee

If the Facility, or any other property where access and/or land/water use restrictions are needed to implement a final remedy selected, described under Permit Condition III.M, is owned or controlled by persons other than the Permittee, the Permittee shall use best efforts to secure from such persons:

III.Q.2.a. Within sixty (60) days of a final remedy decision, an agreement to provide access to such property to EPA and the State, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Permit including, but not limited to, those activities set forth in Permit Condition III.Q.1.a. above;

III.Q.2.b. Within thirty (30) days of a final remedy decision, an agreement, enforceable by the Permittee and EPA, to refrain from using the Facility, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the corrective measures to be implemented pursuant to this Permit;

III.Q.2.c. The execution and recordation in the Recorder's Office (or other appropriate land records office) of Black Hawk County, Iowa, of an appropriate instrument, running with the land, that grants to a third party acceptable to EPA, and to EPA as a third-party intended beneficiary, the right to enforce any land/water use restrictions required by this Permit, or other restrictions that EPA determines are necessary to ensure non-interference with, or ensure the protectiveness of, the corrective measures to be implemented pursuant to this Permit.

III.Q.2.d. Within thirty (30) days of EPA's Final Remedy decision, the Permittee shall submit to EPA for review and approval with respect to such property:

- i. A draft instrument that is enforceable under the laws of the State of Iowa, and

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- ii. A current title insurance commitment, or some other evidence of title acceptable to EPA, which shows title to the land described in the instrument to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, the Permittee is unable to obtain release or subordination of such prior liens or encumbrances).
- III.Q.2.e. Within fifteen (15) days of EPA's approval and acceptance of the instrument and title evidence, the Permittee shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment to adversely affect title, the instrument shall be recorded with the Recorder's Office (or other appropriate land records office) of Black Hawk County, Iowa.
- III.Q.2.f. Within forty-five (45) days of the recording of the instrument, the Permittee shall provide to EPA a final title insurance policy, or other final evidence of title acceptable to EPA, and a certified copy of the original recorded instrument showing the clerk's recording stamps.
- III.Q.2.g. As used in this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access, access easements, land/water use restrictions, restrictive easements, and/or an agreement to release or subordinate a prior lien or encumbrance. If: (a) any access or land/water use restriction agreements required by this Section are not obtained within thirty (30) days of the Permittee's receipt of a final remedy decision; (b) any instrument required by Permit Conditions III.Q.2.c. of this Permit is not submitted to EPA in draft form within thirty (30) days of the Permittee's receipt of EPA's Final Remedy decision; or c) the Permittee is unable to obtain an agreement from the holder of a prior lien or encumbrance to release or subordinate such lien or encumbrance to the instrument within thirty (30) days of the Permittee's receipt of a final remedy decision, the Permittee shall promptly notify EPA in writing, and shall include in that notification a summary of the steps that it has taken to attempt to comply with Permit Conditions III.Q.1. or III.Q.2. of this Permit. EPA may, as it deems appropriate, assist the Permittee in obtaining access or land/water use restrictions, or in obtaining the release or subordination of a prior lien or encumbrance.
- III.Q.3. If EPA determines that land/water use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the corrective measures required by this Permit, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, the Permittee shall cooperate with EPA's and the State's efforts to secure such governmental controls. Notwithstanding any provision of this Permit, EPA and the State retain all of their access authorities and rights, as well as all of their rights to require land/water use restrictions, including enforcement authorities related thereto, under RCRA and any other applicable statute or regulations.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.Q.4. Unless otherwise noted, annual inspections will be conducted at sites subject to ICs to verify that all site-specific ICs have been implemented and are being properly maintained. The annual inspection will include visual inspection, including upkeep of posted signs, maintenance of grounds, and physical use of the site and review of pertinent records relating to each site.
- III.Q.5. Reporting
- III.Q.5.a. The Permittee shall notify EPA of any deficiencies or violations of an IC that may disrupt its effectiveness within thirty (30) days of becoming aware of the breach and will describe the corrective actions taken or to be taken along with anticipated schedules for initiation and completion.
- III.Q.5.b. The Permittee shall convey IC-related information in the Quarterly Progress Report to EPA. The report will serve to notify agencies of the following:
- i. Changes in land uses including those that are not considered “major” as defined below. EPA will be notified of any planned activity involving significant excavation or water well installation.
 - ii. The status of the ICs and how any IC deficiencies or inconsistent uses have been addressed.
 - iii. Any maintenance of any physical markers or site upkeep.
 - iv. Results of the annual field inspection.
 - v. Results of any groundwater sampling conducted during the reporting period.
- III.Q.5.c. The Permittee shall provide written notification to EPA whenever it anticipates any “major change in land use.” A “major change in land use” would include:
- i. A change in land use that is inconsistent with the exposure assumptions in the risk assessment that was the basis for the ICs (either human health or ecological risk assessment.)
 - ii. Any change from industrial or commercial land use to residential or recreational land use.
 - iii. Any action that may disrupt the effectiveness of a corrective action (e.g., excavation at a landfill, dewatering that disrupts a pump and treat system.)

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- iv. Any other action that might alter or negate the need for the IC (e.g., any plan to actively remediate a site subject to ICs in order to allow for unrestricted use.)
- III.Q.5.d. Notification of “major change in land use” will occur at least a minimum of 90 days prior to the anticipated change to allow for EPA review, concurrence, possible public comment, and for modification of the Permittee’s RCRA permit. A notification would include:
 - i. An evaluation of whether or not the anticipated land use change will pose unacceptable risks to human health and the environment or negatively impact the effectiveness of the remedy outlined in the Final Remedy Decision and Response to Comments.
 - ii. An evaluation of the need for any additional remedial action resulting from the anticipated land use changes.
 - iii. A proposal for any changes to the selected remedial action and identification of requirements.
- III.Q.5.e. A site evaluation report will be done every 5 years to assess the effectiveness and continued appropriateness of the ICs. The report will document the following:
 - i. All information presented in the previous years’ Quarterly Progress Reports concerning ICs.
 - ii. Effectiveness of ICs in protection of the affected parties as planned in the Statement of Basis.
 - iii. Any changed circumstances that render the ICs ineffective.
 - iv. A review of the parties affected or potentially affected by the ICs and site contamination.
 - v. Possible IC modifications to provide necessary protection, or new IC requirements.
- III.Q.5.f. Procedures for IC modification or termination
 - i. Modification: Any modifications to ICs necessary due to land use or remedial action changes shall be proposed by the Permittee. The proposed IC changes will be resubmitted to EPA for review and approval. Following approval, changes will be circulated to all stakeholders for implementation.
 - ii. Applicability: ICs will take effect only after the Final Corrective Measures Decision and Response to Comments is issued.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- iii. Termination: IC will be maintained until the concentration of hazardous constituents in the soil and groundwater are at such levels to allow for unlimited use and unrestricted exposure. When those levels have been achieved, a request for IC termination shall be submitted to the EPA for approval. The request for IC termination shall then be put out for public comment. Following approval of IC termination by EPA, the permit shall be modified to remove references to the IC. At that point, physical features at the site related to ICs may be removed. All relevant concerned parties shall be informed of the termination. All activities related to termination of the IC(s) will be documented in the Quarterly Progress Report.
- iv. Future Property Conveyance: Should all or part of an area subject to IC restrictions be conveyed, either in title or some lesser form of property interest, to any other agency, private person, or entity out of the Permittee's control, such conveyance will be in accordance with 40 CFR 270 Subpart D, and Section I.E.12. of the Permit. In this event, the Permittee shall notify the EPA at least ninety (90) days prior to any conveyance or transfer, regardless of whether such conveyance is to a federal or non-federal party, and IC restrictions shall be reviewed and incorporated into the property transfer to ensure that the ICs shall remain in place after the property is conveyed. Any notice shall include the following:
 - (a) Type of property conveyance
 - (b) The anticipated date of conveyance
 - (c) The future property owner
 - (d) The sites affected by the conveyance
 - (e) The mechanism(s) (such as negative easements and restrictive covenants) that shall be used for maintaining ICs after the property conveyance or that, prior to finalization of property conveyance, the area subject to the IC shall be cleaned to any use standards that remove the need for a IC. Implementing ICs at any part of the Permittee's property, however, will not have the effect of creating, disposing, or altering any real property rights on the Permittee's property.

III.R. CORRECTIVE MEASURES IMPLEMENTATION (CMI)

Due to the size of the Permittee's facility, proposed property transfer(s), and the presence of several spatially distinct SWMUs and AOCs, several separate SWMU-specific and AOC-specific remedies will be required to address all of the contamination present at the facility. Remedies

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

which are designed to address contaminant releases at individual SWMUs and AOCs are described in this section along with ICs requirements specific to those remedies. General IC requirements applicable to all remedies with ICs are described in Section III.Q.

III.R.1. Corrective Measures Implementation at Rubbish Pit (SWMU 19A) and Southeast Area of Concern (Southeast AOC 1)

The Director has made a final decision to select corrective measures for the Rubbish pit (SWMU 19A) and Southeast Area of Concern (Southeast AOC1). The final remedy selected for implementation due to contaminated soils at SWMU 19A and Southeast AOC 1 consists of two components, engineered controls and institutional controls. SWMU 19A and Southeast AOC 1 are depicted in Permit Attachment III - 2 and III - 3.

III.R.1.a. The Permittee is responsible for the design, construction, implementation, and continued performance monitoring of the selected corrective measures for SWMU 19A and Southeast AOC 1, which includes the following:

i. Engineering Controls

Engineered Controls consist of the use of the existing buildings and paved areas as barriers to prevent exposure through direct contact of the contaminated subsurface soils and waste foundry and casting sands. A preference for the use of pavement or other means of provided a substantial barrier will be employed during planning of new construction. Limited greenspace areas with trees, shrubs, and grass will have clean shallow soil backfill.

ii. Institutional Controls

Institutional Controls is a very significant component of the final remedy. The primary means for establishing institutional controls will be through a restrictive environmental covenant, enforceable by the EPA. The restriction will be made under the Iowa Uniform Environmental Covenants Act (UECA). The Permittee shall comply with Section III.Q, General Requirement of Institutional Controls, for establishing, recording, maintaining the IC instrument(s). The Permittee shall include in the IC instrument(s), at a minimum, the following elements:

- (a) Surveyed areas showing the location of areas underlain by the contaminated soils and waste foundry and casting sands.
- (b) Under the restrictive covenant and the Permit, inspection and maintenance requirement for the engineered controls including requirements for periodic inspection, reporting and maintenance of the buildings, paved areas, and

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

limited greenspace areas in order to ensure the effectiveness of the engineered barriers.

- (c) An easement to allow long-term inspection and maintenance of the engineered barrier by the Permittee and/or EPA.
- (d) An easement to allow the Permittee and/or EPA to perform any environmental sampling determined to be necessary for the protection of human health.
- (e) Under the restrictive covenant, use of water produced from the two existing production wells shall be limited to non-contact cooling water.
- (f) Under the restrictive covenant, no additional water production wells shall be installed. If maintenance or repair of the existing production wells is necessary, notification in advance must be provided to the Permittee and the EPA, and written approval must be obtained from the Permittee and EPA prior to commencing the work.
- (g) An easement to allow for inspection and sampling by the Permittee and/or EPA of any wells including the two existing production wells. This easement will also allow the future installation, maintenance, and sampling of groundwater monitoring wells, or use of alternate means of collecting groundwater samples such as direct push technology, if necessary for the protection of human health.
- (h) Under the restrictive covenant, restrictions on the future use of Southeast AOC 1 and SWMU 19A. Specifically, the property shall not be used for any purpose other than industrial, commercial, or adult educational uses, and specifically shall not be used for child care facilities.
- (i) Under the restrictive covenant, a procedure for obtaining prior approval from the EPA for any activity involving subsurface excavation, maintenance, or new construction within the area of Southeast AOC 1 and SWMU 19A. This would be done in order to ensure (1) worker health and safety, (2) proper handling and management of contaminated excavated materials including soils and waste foundry and casting sand, and (3) that the integrity of the engineered barriers is maintained.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

- III.R.1.b. The selected corrective measures for SWMU 19A and Southeast AOC 1 must be implemented and maintained until the media cleanup standards for the constituents of concern and the conditions of this Permit are met. The media cleanup standards for the constituents of concern are listed in EPA Region 9's Preliminary Remediation Goals (PRGs), October 2004 (industrial levels for soil) and Maximum Contaminant Levels (MCLs) for groundwater. For any groundwater contaminant that does not have an established MCL, the Region 9 PRGs for tap shall be used.
- III.R.1.c. Within ninety (90) days of the effective date of this permit, the Permittee shall submit the following Corrective Measures Implementation (CMI) Submittal for SWMU 19A and Southeast AOC 1
- i. CMI Work Plan developed in accordance with Task 1 of Permit Attachment III-4;
 - ii. Health and Safety Plan developed in accordance with Task 2 of Permit Attachment III-4;
 - iii. Operation and Maintenance Plan developed in accordance with Task 3 of Permit Attachment III-4 ;
 - iv. Community Relations Plan developed in accordance with Task 4 of Permit Attachment III-4;
- III.R.1.d. The CMI Work Plan, Operations and Maintenance Plan and Community Relations Plan will be reviewed and approved in accordance with the procedures set forth in Permit Condition III. N. herein. Upon approval thereof by EPA, the Permittee shall implement said plans in accordance with the schedule(s) contained therein.
- III.R.1.e. The Permittee shall submit a Corrective Measures Implementation Report (CMI Report) to EPA in accordance with the EPA approved CMI work plan schedule. The CMI Report shall be developed in accordance with Task 5 of Permit Attachment III-4. The CMI Report will be reviewed and approved in accordance with the procedures set forth in Permit Condition III. N. herein.
- III.R.1.f. The Permittee shall submit a report for an evaluation of the corrective measure effectiveness and performance every five (5) years to EPA. The first report shall be due within sixty (60) days of the 5-year anniversary of EPA's approval of the Corrective Measures Implementation Report for SWMU 19A and Southeast AOC 1. The 5-Year Corrective Measures Performance Evaluation Report shall be developed in accordance with Task 6 of Permit Attachment III-4. The 5-Year Corrective Measures Performance Evaluation Report will be reviewed and approved in accordance with the procedures set forth in Permit Condition III. N. herein.

OPERATING PERMIT – JOHN DEERE WATERLOO WORKS

Based upon the evaluation, the EPA may require the Permittee to conduct additional investigation and/or study (an additional RFI and/or CMS) in order to modify the existing remedy or select a new remedy. If action is needed to protect human health and the environment from releases or to prevent or minimize the further spread of contamination while long-term remedies are pursued, the EPA may require the Permittee to implement Interim Measures.

- III.R.1.g. Within forty-five (45) days after the Permittee obtains information demonstrating that the approved corrective action objectives have been satisfied, the Permittee shall submit a Corrective Measures Completion Report (CMCR) to EPA. The CMCR shall be developed in accordance with Task 7 of Permit Attachment III-4, and presents a summary of such information in sufficient detail and quality to provide EPA a basis to confirm that the criteria have been satisfied. The CMCR will be review and approved in accordance with the procedures set forth in Permit Condition III.N. herein.

*** END OF PERMIT MODULE III –***

Permit Attachment II-1

Preparedness and Prevention Plan

If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.

SECTION F PROCEDURES TO PREVENT HAZARDS

F.1 SECURITY

Security procedures, structures and equipment are described as follows.

F.1.a SECURITY PROCEDURES AND EQUIPMENT

The perimeter of the Westfield Plant and Foundry property is encircled with an eight-foot chain link fence. Barbed wire strands top many remote portions of the fencing. Guards or plant personnel secure all main entrances and gates. Remote cameras, which monitors other gates, allow guards to observe activities on televisions located inside the main guard station at Gate 4. Unmanned gates are kept locked. Some gates may be opened and shut by remote control inside the main station. Guards can see the gates by a remote camera and television.

In addition to the general security procedures provided by fencing, gates and guards, several other features contribute to the safety and security of the facility. Ample outdoor lighting is provided. All security guards are equipped with hand-held, two-way radios that allow a person in the field to communicate with a base station when necessary. In addition, both internal and external telephone service is readily available throughout the facility.

Entrance to the plant and/or grounds must be by approval of a guard. Employees must use identification cards. Visitors to the Westfield Plant offices must be met at the lobby and accompanied into the plant by the individual he/she is visiting. Visitors and vehicles entering the plant, office, or grounds must sign a visitors log or the guard logs them in.

Before a contractor is allowed to enter the plant to do work, the contractor must first fill out a questionnaire and submit it for evaluation and acceptance by Westfield Plant personnel. If the contractor is accepted to do work at the Westfield Plant the contractor is then placed on an approved contractor's list. Every approved contractor employee who enters the plant to do work must first view a safety video and obtain a contractor's pass and, if applicable, a vehicle pass from Security. The passes are good for a specified period of time. The passes must be returned to Security when the contractor finishes the work and leaves the plant. Property passes are also available for anyone that needs to bring equipment or tools into the plant.

F.1.a(1) 24-HOUR SURVEILLANCE INSPECTION

There is a 24-hour, 365-days a year surveillance of all gates and entrances. The surveillance is by television cameras as well as by patrolling guards. Guards make inspection rounds continually throughout the day/night.

F.1.a(2)(a) BARRIER

A fence that is in good condition completely surrounds the Westfield Plant property.

F.1.a(2)(b) MEANS TO CONTROL ENTRY

All entry into the plant, office or grounds is controlled. Approval must be obtained for any person to enter the facility.

F.1.a(3) WARNING SIGNS

The Westfield Plant no longer has any regulated units. This Part B Permit application is only to seek a Part B Permit to complete Corrective Measures efforts at the Westfield Plant. Therefore, 40 CFR Part 264.14(c) is not pertinent to this permit application.

F.2 INSPECTION PROGRAM

This section outlines the Westfield Plant inspection program. The procedures set forth in this plan dictate how the plant will comply with the regulatory requirements. Copies of this plan are available at the Environmental Affairs Department at all times and are strictly followed.

F.2.a GENERAL INSPECTION PROGRAM

The inspection program is intended to provide a mechanism to prevent unknowing or unauthorized entry into a solid waste management unit that could expose a person to hazardous constituents and create a threat to human health and/or cause a release of hazardous constituents into the environment. The inspection program is designed to prevent entry and/or exposure to a solid waste management unit that could create a hazard to human health and/or cause a release of hazardous constituents into the environment.

Qualified individuals assigned the responsibility to detect any unsafe conditions at the plant and prevent adverse consequences implement the inspection program. The designated individuals have the training and authority to: (1) Implement the required inspection; (2) Perform necessary evaluations and hazards assessments; (3) Recommend appropriate corrective/remedial action.

Inspection is performed according to a pre-determined schedule based on engineering knowledge and operational experience with the systems and processes involved. Each inspection item has the content and frequency necessary to alert facility personnel prior to development of a problem. A trained inspector evaluates and assesses each item indicating a potential problem through regular observation of the process or procedures. The level of response and its timing is determined by the nature and seriousness of the problem identified, with protection of people and the prevention of adverse environmental impact being of paramount concern.

F.2.a(1) TYPES OF PROBLEMS

Potential problems relevant to the solid waste management units (SWMU's) would be human exposure to hazardous constituents and/or a release of hazardous constituents into the environment. Exposure and/or release could occur at least three ways as follows: (1) Disturbing the SWMU by digging, grading, excavating, boring, etc.; (2) Removing hazardous constituents from the SWMU; (3) Disruption of a SWMU by natural events.

The following considerations are pertinent to identifying the types of problems that may occur related to general facility operations.

Breach of security, either intentional or unintentional by persons, animals or natural events. Such breach may occur due to: (1) Failure of the surveillance system; or (2) Damage to fences and gates.

Health and safety equipment failure, absence or inaccessibility.

Unreliable or improper hazardous constituent collection and/or containment equipment.

F.2.a(2) FREQUENCY OF INSPECTIONS

Table F-1 shows the schedule for inspecting general facility operations.

SECTION F
REVISION: 0
OCTOBER 20, 2000

TABLE F-1
GENERAL INSPECTION SCHEDULE

<u>EQUIPMENT</u>	<u>INSPECTION ELEMENT/TYPE OF PROBLEM</u>	<u>FREQUENCY</u>
Inspected by Security Department (Dept. 03E):		
Fence	Inspect entire perimeter for breaches or damage	Monthly
Gates	Check gate locks	Weekly
Surveillance System	Check for operation (guards, close circuit TV, controlled entry, etc.)	Daily
Warning Signs	Check for presence	Monthly
Lighting	Check lights for operability	Weekly
Protective Gear	Check accessibility, supply, condition	Monthly
Alarm Systems	Check accessibility, sound and/or flashing light operability	Daily
Internal and External Communication	Check accessibility and operability	Daily
Fire Extinguishers	Check pressure gauge for full charge indication; inspection tag to insure annual maintenance by outside fire service is up-to-date; check seal; Check accessibility	Monthly
Absorbent Materials	Check supply	Weekly
Recovery Drums	Check supply	Weekly

SECTION F
REVISION: 0
OCTOBER 20, 2000

Figure F-1 is a typical inspection form for general facility operation inspections. The form may be modified as necessary to accommodate the changing needs of the facility. The inspection report forms are prepared in advance to include the pertinent items to be inspected according to the schedule. A separate Remedial/Re-inspection report is used for Corrective Action. The second part is a re-inspection to verify that the work has been completed properly. Figure F-2 is a typical Remedial/Re-inspection report.

SECTION F
REVISION: 0
OCTOBER 20, 2000

FIGURE F-1
TYPICAL INSPECTION FORM
GENERAL FACILITY OPERATIONS

John Deere Waterloo Works, Westfield Avenue Plant
INSPECTION REPORT
(Daily, weekly, etc.)

Page ____ of ____

Inspector's Name/Title _____
Date of Inspection _____ (day/month/year)
Time of Inspection _____ (military time)

INSPECTION CHECKLIST

ITEM	INSPECTION ELEMENT	STATUS		IF UNACCEPTABLE REASON
		Accept- able	Unaccept- able	

Emergency Coordinator Contacted: Yes/No
Response Timing: Urgent/routine
Signature: _____

SECTION F
REVISION: 0
OCTOBER 20, 2000

FIGURE F-2
REMEDIAL WORK ORDER

REMEDIAL WORK ORDER

Date ____/____/____

Corrective Action Assigned To: _____/_____
Name Title

Equipment Item:

Location:

Inspection Element/Type of Problem:

Date of Inspection: ____/____/____

Required Remedial Responses: _____

Work To Be Complete By: ____/____/____

Signature of Supervisor

WORK COMPLETION REPORT

Completed On: ____/____/____ COMMENTS: _____

By: _____
Initials

REINSPECTION REPORT

Observation:

Comments:

Signature of Inspector

Date ____/____/____

F.3 PREPAREDNESS AND PREVENTION REQUIREMENTS

The Westfield Plant no longer has permitted facilities to accept and manage RCRA hazardous wastes from off-site. All on-site hazardous waste facilities have been either reclassified as Clean Water Act facilities or Clean Closed under RCRA and the existing Part B Permit.

The Westfield Plant is not applying for a Part B Permit to accept or manage hazardous wastes from off-site or store hazardous wastes on-site. This permit application is only to seek a Part B Permit to complete RCRA Corrective Action efforts at the Westfield Plant. Since this facility is no longer an owner or operator of permitted hazardous waste facilities, we believe 40 CFR Part 264 Subpart C and 40 CFR Part 270.14(b)(6), (8) and (9) do not apply to this Part B Permit application.

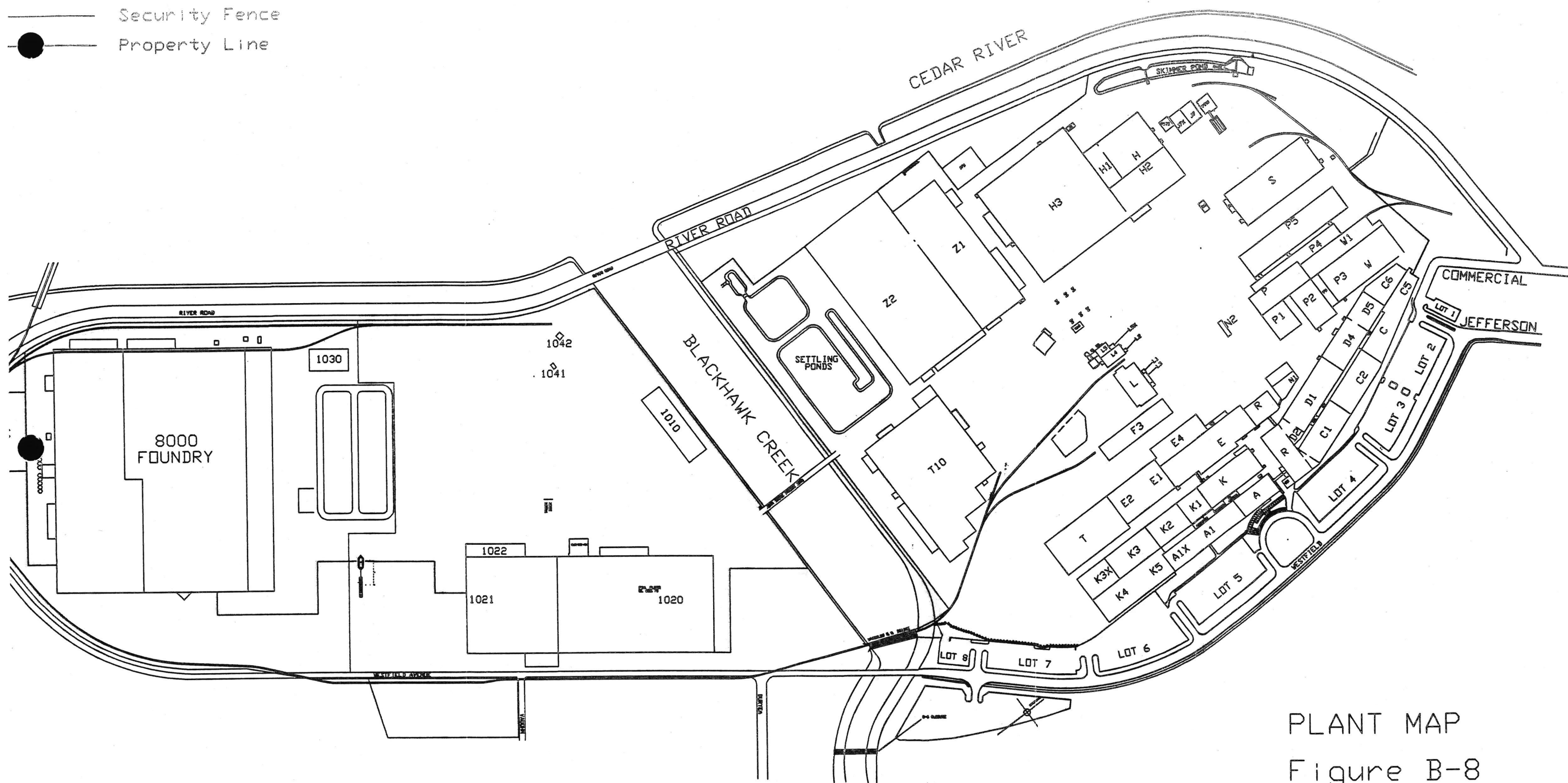
For informational purposes the following is provided as a part of this application. The Westfield Plant has the equipment listed in 40 CFR Part 264.32. Fixed internal/external telephones and fire extinguishers are readily available throughout the plant. Hand-held two-way radios are used by the security guards throughout the plant. The Westfield Plant has its own fire brigade which is located near the main guard station (Gate 4) in front of the plant. The brigade includes staff trained in fire fighting and equipment necessary to control most plant fires. The fire department has a small fire truck that is dispatched to the scene of plant fires. Additionally, fire extinguishers, fire hoses and fire hydrants are located strategically throughout the plant. Water for fire is present in many locations around the plant. Since city water is used for fire protection, the water volume and pressure is adequate to supply the hoses of the on-site fire department. The Waterloo Fire Department is readily available to assist in major fires at the Westfield Plant. The Waterloo Fire Department can arrive inside the plant within minutes of initial notice. The Waterloo Fire and Police Departments and the local hospitals are familiar with plant entrances, the plant layout and general operations of the Westfield Plant.

Permit Attachment II-2

Facility Map

If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.

The John Deere Waterloo Work – Westfield Avenue Plant property boundaries are shown on Figure B-8, submitted in the John Deere Part B Permit Application on January 18, 2001. The exact legal descriptions are consisting of twenty-one (21) separate abstracts, which are kept in John Deere's corporate law office department in Moline, Illinois.



Permit Attachment III-1

SWMU Locations

If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.

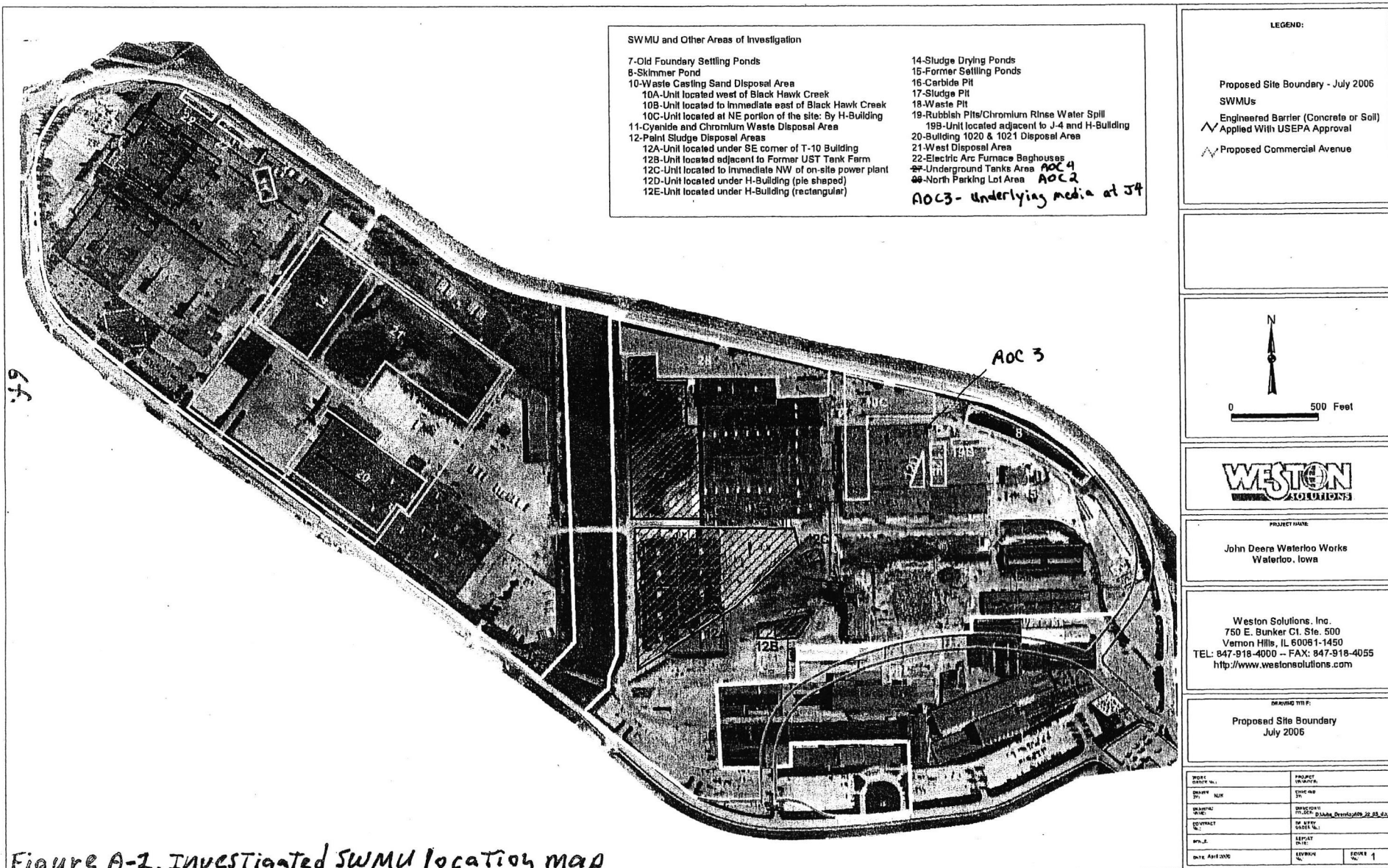
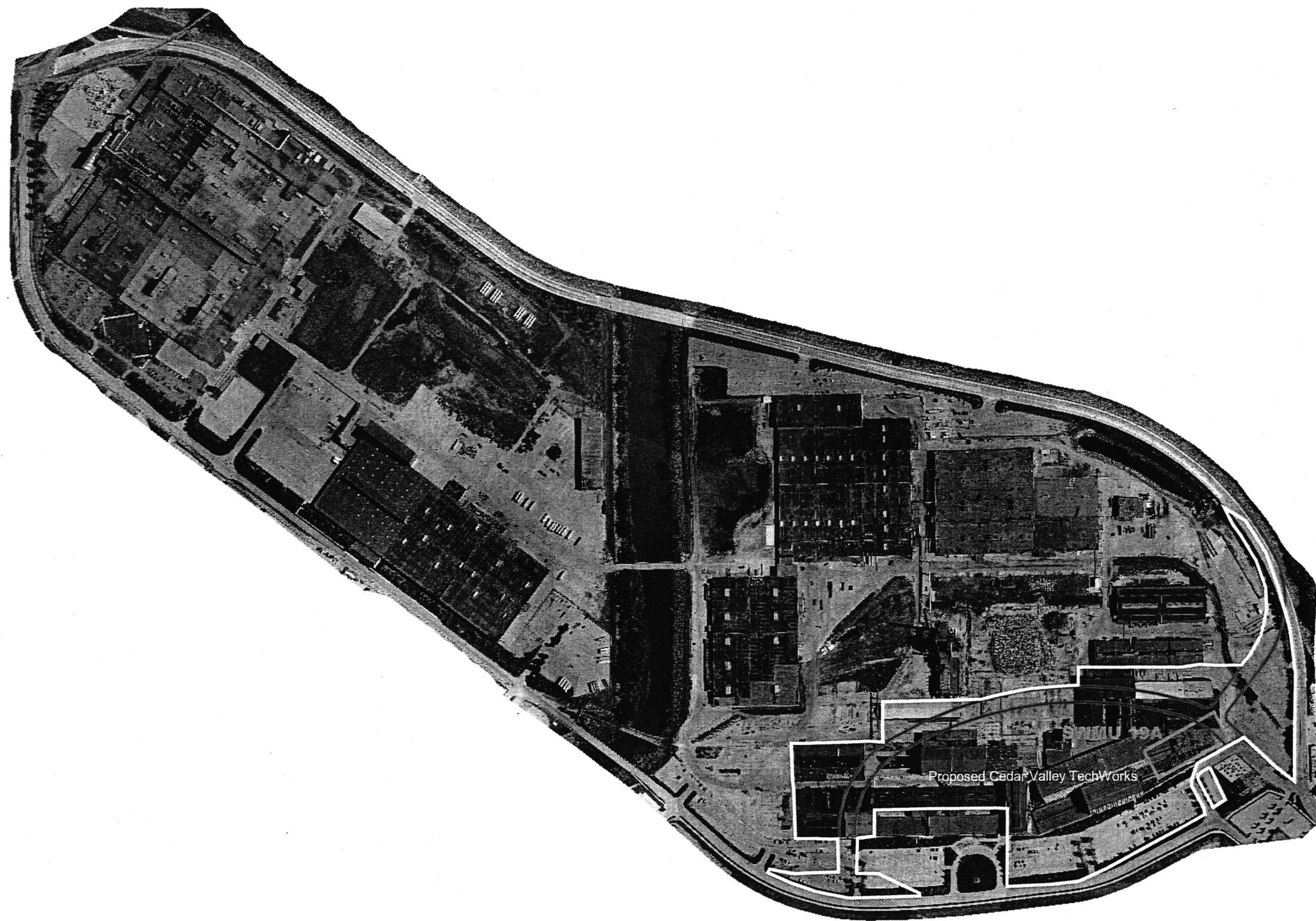


Figure A-2. Investigated SWMU location map

Permit Attachment III-2

**John Deere Waterloo Works
SWMU 19A and Southeast AOC 1 Locations**

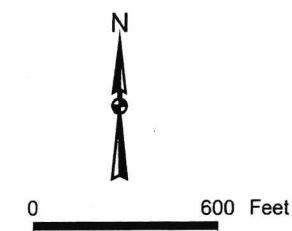
If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.



LEGEND:

- SWMU Boundary
- Southeast AOC-1 Boundary (Approximate)
- Proposed Boundary

NOTES:



PROJECT NAME:

John Deere Waterloo Works
Waterloo, Iowa

Weston Solutions, Inc.
750 E. Bunker Ct. Ste. 500
Vernon Hills, IL 60061-1450
TEL: 847-918-4000 – FAX: 847-918-4055
<http://www.westonsolutions.com>

DRAWING TITLE:

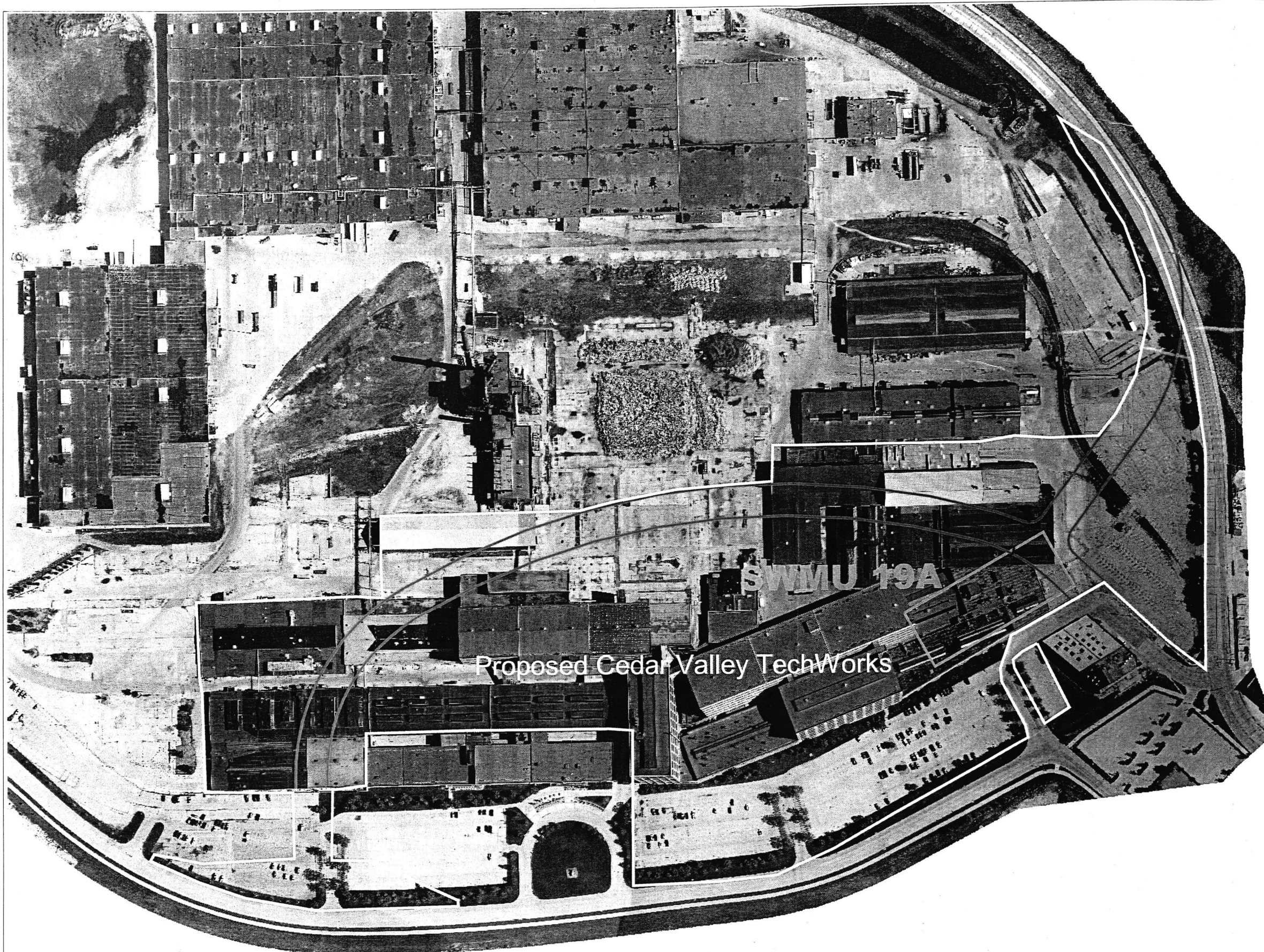
Site Layout
John Deere Waterloo Works
Waterloo, Iowa

WORK ORDER No.:	PROJECT MANAGER:
DRAWN BY: NJK	CHECKED BY:
DRAWING NAME:	DIRECTORY/ FOLDER: D:\John_Deere\ap\04_13_06_csm.apr
CONTRACT No.:	DELIVERY ORDER No.:
SCALE:	REPORT DATE:
DATE: October 2006	REVISION No.:
	FIGURE No. 1-1




Permit Attachment III-3

SWMU 19A and Southeast AOC 1 Details

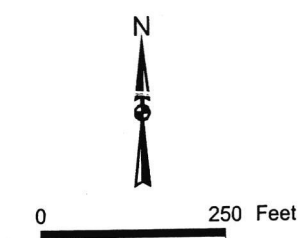
If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.



LEGEND:

-  SWMU Boundary
-  Southeast AOC-1 Boundary (Approximate)
-  Proposed Boundary

NOTES:
The Southeast property =
The Southeast AOC#1 and SWMU 19A
(To be transferred to TechWorks)



PROJECT NAME:

John Deere Waterloo Works
Waterloo, Iowa

Weston Solutions, Inc.
750 E. Bunker Ct. Ste. 500
Vernon Hills, IL 60061-1450
TEL: 847-918-4000 – FAX: 847-918-4055
<http://www.westonsolutions.com>

DRAWING TITLE:

Layout for Presumptive Alternative
John Deere Waterloo Works
Waterloo, Iowa

WORK ORDER No.:	PROJECT MANAGER:
DRAWN BY: NJK	CHECKED BY:
DRAWING NAME:	DIRECTORY FOLDER: D:\John_Deere\ap04-13_06_csm.apr
CONTRACT No.:	DELIVERY ORDER No.:
SCALE:	REPORT DATE:
DATE: October 2006	REVISION No.:
	FIGURE No. 2

Permit Attachment III-4

Corrective Measures Implementation Scope of Work

If information becomes available that the procedures outlined or the information contained within this permit attachment is inadequate or no longer current, the Permittee will be requested to revise the attachment, and upon approval from the EPA, modify the Permit to include the revised attachment.

ATTACHMENT III-4

CORRECTIVE MEASURES IMPLEMENTATION SCOPE OF WORK

INTRODUCTION: Based on the outcome of the Corrective Measures Study ("CMS"), the Permittee is responsible for the design, construction, implementation, and continued performance monitoring of corrective measures at the Facility. The selected corrective measures must be implemented and maintained until the corrective measures objectives and the conditions of this Permit have been met.

- a. **Purpose** - The purpose of the Corrective Measures Implementation ("CMI") is to construct, operate, maintain, and monitor the performance of the corrective measures selected by EPA for implementation by the Permittee at the Facility.
- b. **Scope** - Submittals required for the CMI include:
 - i Task 1: CMI Workplan;
 - ii Task 2: Health and Safety Plan ("HSP");
 - iii Task 3: Operation and Maintenance ("O&M") Plan, which will include a Long-term Groundwater Monitoring Plan;
 - iv Task 4: Community Relations Plan ("CRP");
 - v Task 5: Corrective Measures Implementation Report ("CMIR");
 - vi Task 6: 5-Year Corrective Measures Performance Evaluation Report;
 - vii Task 7: Corrective Measures Completion Report ("CMCR")

I. TASK 1: CMI WORKPLAN

The CMI Workplan shall contain the following elements:

- a. **Introduction/Purpose** - Describe the purpose of the document and provide a summary description of the project. Elements of this description shall include:
 - i A summary description of current conditions at the Facility;
 - ii A summary of the corrective measures objectives;
 - iii A description of the selected corrective measures;
 - iv Preliminary design criteria and rationale;
 - v Performance expectations and proposed corrective measures completion criteria;
 - vi Preliminary design criteria and rationale;
 - vii General operation and maintenance requirements;
 - viii Design and implementation precautions which will include, but are not limited to:
 - A. Special technical problems;
 - B. Additional engineering data required;
 - C. Permits and regulatory requirements; and
 - D. Access, easements, right-of-way.
- b. **Project Management Plan** - Describe the construction management approach including levels of personnel authority and responsibility (including an organization chart), lines of

communication and the qualifications of key personnel who will direct the construction of the corrective measures and provide construction quality assurance/quality control (including contractor personnel).

- c. **Remedial Quality Assurance Project Plan/Sampling and Analysis Plan** - In order to properly describe any sampling and monitoring activities necessary for effective operation and maintenance of the corrective measures, and to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented, the CMI Work Plan shall include a Quality Assurance Project Plan ("QAPP")/Sampling and Analysis Plan ("SAP"). This QAPP/SAP shall document all remedial goal verification (how the Permittee will demonstrate that the cleanup standards have been attained), monitoring procedures, sampling, field measurements and sample analyses to be performed during implementation of the corrective measures.
- d. **Project Schedule** - The project schedule must include timing for key elements of the bidding process, timing for initiation and completion of all major corrective measure construction tasks, and specify when the other deliverables required by this Permit are to be submitted to EPA.
- e. **Corrective Measures Objectives** - Discuss the objectives of the corrective measures (engineered and institutional controls) to be implemented at the Facility, including applicable media cleanup standards.
- f. **Construction Quality Assurance/Quality Control Plan** - The purpose of construction quality assurance is to ensure, with a reasonable degree of certainty, that the completed corrective measures will meet or exceed all design criteria, plans, and specifications. The CMI Work Plan must include a Construction Quality Assurance Plan to be implemented by the Permittee.
- g. **Waste Management Procedures** - Describe the wastes generated by construction of the corrective measures and how such wastes will be managed.
- h. **Contingency Procedures** - General contingency procedures to be described in the text of the CMI Work Plan include the following:
 - i Changes to the design and/or specifications may be needed during construction to address unforeseen problems encountered in the field. Procedures to address such circumstances, including notification of EPA, must be included;
 - ii The CMI Work Plan must specify that, in the event of a construction emergency (e.g., fire, earthwork failure, etc.), the Permittee shall orally notify EPA within 24 hours of the event and will notify EPA in writing within 72 hours of the event. The written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on human health and/or the environment;
 - iii Procedures to be implemented if unforeseen events prevent corrective measure construction; and
 - iv A list of all emergency contacts (including phone numbers).

II. TASK 2: HEALTH AND SAFETY PLAN

The Permittee shall submit to EPA a Health and Safety Plan ("HSP") for all field activities, although it does not require approval by EPA. The HSP shall be developed as a stand alone document but may be submitted with the CMI Work Plan. The HSP must, at a minimum, comply with all applicable Occupational Safety and Health Act ("OSHA") requirements.

III. TASK 3: OPERATION AND MAINTENANCE PLAN

The Permittee shall prepare an O&M Plan that outlines procedures for performing operations, long-term maintenance and monitoring of the corrective measures, including long-term groundwater monitoring. The O&M Plan shall, at a minimum, include the following:

- a. **Introduction/Purpose** - Describe the purpose of the document and provide a summary description of the project.
- b. **Project Management** - Describe the management approach including levels of personnel authority and responsibility (including an organizational chart), lines of communication and the qualifications of key personnel who will operate and maintain the corrective measures (including contractor personnel).
- c. **System Description** - Describe the corrective measures and identify significant equipment, as applicable. Provide schematics or process diagrams to illustrate system design and operation.
- d. **Personnel Training** - Describe the training process for O&M personnel, as applicable. Respondent shall prepare, and include in the technical specifications governing treatment systems, the contractor requirements for providing: appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up and operation of the corrective measures, and training covering appropriate operational procedures once the start-up has been successfully accomplished.
- e. **Start-Up Procedures** - Describe all applicable corrective measure start-up procedures including any operational testing.
- f. **Operation and Maintenance Procedures** - Describe normal operation and maintenance procedures including:
 - i A description of tasks for operation, to include long-term groundwater monitoring;
 - ii A description of tasks for maintenance;
 - iii A list of monitoring wells to be sampled as part of the Facility's monitoring network;
 - iv A list of groundwater constituents which will be targeted for sampling and analysis;
 - v A description of prescribed treatment or operation conditions; and
 - vi A schedule showing the frequency of each O&M task.
- g. **Data Management and Documentation Requirements** - The O&M Plan shall specify that the Permittee will collect and maintain the following information:

- i Progress Report Information;
 - ii Monitoring and laboratory data;
 - iii Records of operating costs; and
 - iv Personnel, maintenance, and inspection records.
- h. **O&M Quality Assurance Project Plan/Sampling and Analysis Plan** - In order to properly describe any sampling and monitoring activities necessary for effective operation and maintenance of the corrective measures, and to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented, the Permittee shall prepare a Quality Assurance Project Plan ("QAPP")/Sampling and Analysis Plan ("SAP"). This shall document all monitoring procedures, sampling, field measurements, and sample analyses to be performed during O&M activities. The Permittee shall use EPA-approved procedures described in the *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations* (EPA QA/R-5).
- i. **Replacement Schedule for Equipment and Installed Components**
- j. **Waste and/or Contaminated Media Management Practices** - Describe any wastes and/or contaminated media which may be generated by operation of the corrective measures and how they will be managed.
- k. **Corrective Measure Completion Criteria** - Describe the process and criteria for determining when the corrective measures have achieved corrective action objectives. Also describe the process and criteria for determining when maintenance and monitoring may cease.
- l. **Contingency Procedures** - Describe, as applicable, the following types of contingency procedures necessary to ensure system operation in a manner protective of human health and the environment:
 - i Procedures to address system breakdowns and operational problems including a list of redundant and emergency back-up equipment and procedures;
 - ii Alternate procedures to be implemented if the corrective measures suffer complete failure. The alternate procedures must be able to prevent release or threatened releases of hazardous wastes or constituents which may endanger human health or the environment or exceed media cleanup standards;
 - iii The O&M Plan shall specify that, in the event of a major breakdown and/or the complete failure of the corrective measures, the Permittee shall orally notify EPA within 24 hours of the event and will notify EPA in writing within 72 hours of the event. Written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on human health and/or the environment; and
 - iv Procedures to be implemented in the event that the corrective measures are experiencing major operational problems, are not performing to design specifications, and/or will not achieve the cleanup goals in the expected time frame.

If contingencies require modification of the corrective measures in a substantive fashion which also require physical alteration of the monitoring or remediation equipment, a

Construction Work Plan shall be submitted by the Permittee within 30 days of receipt of a written request for the submittal from EPA. The Construction Work Plan shall provide all information necessary to describe the proposed modification to the corrective measures and provide justification for the necessity of the proposed activities to the overall corrective measure effectiveness.

IV. TASK 4: COMMUNITY RELATIONS PLAN

A Community Relations Plan ("CRP") shall be prepared by the Permittee and submitted to EPA for review and approval prior to use. Public Involvement activities that may be required of the Permittee include the following:

1. Conducting an open house or informal meeting (i.e., availability session) in a public location where people (including the media) can talk to representatives of EPA, the State, and the Permittee on a one-to-one basis;
2. Preparing fact sheets summarizing current or proposed corrective action activities (all fact sheets should be reviewed by EPA prior to public distribution);
3. Communicating effectively with people who have vested interest in the corrective action activities; and
4. Maintaining an easily accessible repository (such as a public library) of information on the corrective measure being implemented at the Facility, including this Permit, approved work plans, and/or other reports.

A schedule for community relations activities shall be included in the CRP.

V. TASK 5: CORRECTIVE MEASURES IMPLEMENTATION REPORT

The purpose of the CMIR is to document the construction and implementation of the corrective measures at the Facility. The CMIR shall include the following:

1. a description of the purpose of the CMIR;
2. a synopsis of the corrective measures, design criteria, and certification that the corrective measures were constructed in accordance with the final plans and specifications;
3. an explanation and description of any modifications to the final CMI Work Plan and specifications and why such modifications were necessary;
4. the results of any operational testing and/or monitoring, indicating how initial operation of the corrective measures compares to the design criteria;
5. a summary of significant activities that occurred during construction, including a discussion of problems encountered and how they were addressed;
6. a summary of all inspection findings (including copies of key inspection documents in appendices); and

7. as-built drawings and photographs depicting the constructed corrective measures.

VI. TASK 6: 5-YEAR CORRECTIVE MEASURES PERFORMANCE EVALUATION REPORT

The Permittee shall conduct a Corrective Measure Performance Evaluation and submit a Corrective Measure Performance Evaluation Report documenting the effectiveness of the corrective action final remedy. EPA will review the Corrective Measure Performance Evaluation Report upon its submittal and evaluate the Report for compliance with the SOW. The Corrective Measure Performance Evaluation Report shall, at a minimum, include the following elements:

1. A description of its purpose;
2. A synopsis of the objectives of the corrective measures;
3. Up-to-date maps showing major contaminants concentrations in environmental media;
4. Determine whether the corrective measures are achieving the objectives (reasonable progress is being made toward remedial goals);
5. Determine whether the corrective measures need to be modified to achieve remedial objectives.

VII. TASK 7: CORRECTIVE MEASURES COMPLETION REPORT

The Permittee shall prepare a Corrective Measures Completion Report (CMCR) when the Permittee obtains information demonstrating that the completion criteria for all of the corrective measures have been achieved. The purpose of the CMCR is to fully document how the corrective action objectives and corrective measure completion criteria have been satisfied, and to justify why the corrective measure and/or monitoring may cease. The CMCR shall, at a minimum, include the following elements:

1. A synopsis of the corrective measures implemented;
2. The Corrective Measures Completion Criteria: Describe the process and criteria for determining when the corrective measures and maintenance and monitoring may cease. Corrective measure completion criteria were given in the EPA-approved O&M Plan;
3. A demonstration that the completion criteria have been met. Include results of testing and/or monitoring, indicating how operation of the corrective measures compare to the completion criteria;
4. A summary of work accomplishments (e.g., performance levels achieved, total hours of treatment operation, total treated and/or excavated volumes, nature and volume of wastes generated, etc.);
5. A summary of significant activities that occurred during operations. Include a discussion of problems encountered and how they were addressed;

6. A summary of inspection findings (including copies of key inspection documents in appendices);
7. A summary of total operation and maintenance costs; and
8. A discussion of the potential impacts that cessation of maintenance and monitoring could have on the future effectiveness of the corrective measure and/or potential receptors.